GENDER DIFFERENCES IN EMOTIONAL INTELLIGENCE AND COPING STRATEGIES IN PATIENTS OF BIPOLAR DEPRESSIVE DISORDER

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BY

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DECLARATION

I declare that the thesis entitled **"GENDER DIFFERENCES IN EMOTIONAL INTELLIGENCE AND COPING STRATEGIES IN PATIENTS OF BIPOLAR DEPRESSIVE DISORDER"** has been prepared by me under the guidance of **Dr. Ranjive Mahajan**, Professor and Head, Department of Psychiatry, Dayanand Medical College and Hospital, Ludhiana. No part of this thesis has formed the basis for the award of any degree previously.

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Dedicated
To My Respected
Teachers, Family
& Friends

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Dr. Pretty Duggar

LIST OF ABBREVIATIONS

EI	Emotional Intelligence
BD	Bipolar Disorder
HAM-D	Hamilton Depression Rating Scale

ABSTRACT

INTRODUCTION: Bipolar Affective disorders make up an important category of psychiatric illness. These patients encounter significant life adversity, which has contributed to these being one of the leading causes of disability. Emotional Intelligence is the ability of an individual to understand one's own and other's emotions and feelings and use this knowledge in coping with situations. Coping abilities of individuals determine the vulnerability to stressful life events, which is an important factor influencing the risk for relapse. Ways of coping are an individual's overt and covert behaviors which are employed to reduce or eliminate psychological distress or stressful condition. Yet research on which coping strategies are most influencing disability, in such patients and their comparison between male and female patients is very scarce.

AIM & OBJECTIVES OF STUDY: gender difference in emotional intelligence and coping strategies in persons with bipolar depressive disorders.

MATERIALS & METHODS: It was a cross-sectional study conducted on stable patients who came for follow-up in Psychiatry OPD of DMC&H, Ludhiana. A total of 150 subjects were included. The sample was divided into 3 groups: Females with Bipolar depression (n=50), Males with Bipolar Depression (n=50), Healthy controls (n=50), age matched. The subjects were evaluated on their symptoms via HAM-D scale and their coping strategies by using the Brief Cope Questionnaire.

RESULT: All the subjects were equally divided in terms of genders. Females scored higher on HAM-D than males. Females used emotion focused coping strategies significantly whereas males used problem focused coping strategies. It was also seen that females score higher on emotional intelligence than males.

CONCLUSION: Our study showed females had significant association with the use of emotion focused coping strategies and males showed significant association with problem focused coping strategies. It was also seen that females score higher on emotional intelligence than males. Patients need to get the knowledge about their coping strategies which may help them in long term prognosis and outcome of illness.

KEYWORD: bipolar disorder, depression, emotional intelligence, coping strategies, gender difference in emotional intelligence

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INTRODUCTION

Mood is a diffuse persistent feeling state that lasts hours, days, or longer, while emotions are short-lived responses to stimuli that elicit adaptive responses. Emotional reactivity refers to the threshold for, and magnitude of, emotional responses to these salient stimuli. These emotional responses typically involve changes in several response systems, including perception, feelings, expressive behavior, and peripheral and central physiology. Emotional regulation is a part of an individual's coping style and plays an important role in determining the risk of future episodes. Mood disorders are a chronic mental illness associated with reduced quality of life, high rates of suicide, and high financial costs. Among Mood Disorders, Bipolar depressive disorder is very prevalent and disabling condition in which partial successful treatment is achieved with pharmacotherapy. Various psychosocial interventions are accepted concepts of Coping and Emotional Intelligence have role to add on to efficacy of medication.

Emotional intelligence (EI) has proven to be a significant influence in different areas of everyday life. It is defined as the capacity to process emotional information accurately and efficiently. This processing includes the capability to perceive, assimilate, understand, and manage emotions.

Emotions facilitate thinking by directing attention to changes, such as work that needs to be done and time that is running out. In 2016, a set of principles were used to guide the theorizing of EI, and it was located among broad intelligences. In this model, EI is considered a hot broad intelligence. "Cool intelligence relates to impersonal knowledge, whereas hot intelligence has to do with matters that are highly affective; they make our blood boil or chill out hearts[1].

The new model by Mayer et al., defines EI as "the ability to reason validly with emotions and with emotion-related information, and to use emotions to enhance thought". These abilities involve identifying emotional content, facilitating thinking, understanding meanings of emotions, and managing

emotions. It puts forth another Four-Branch Model comprising the branches: perceiving emotion (with seven abilities), facilitating thought using emotion (five abilities), understanding emotions (eight abilities), and managing emotions (six abilities). In this model, new abilities were added, ability from the original model was divided into two separate abilities, and a number of abilities from the previous model were kept intact[1]. Socially, females are known to have greater EI than males. It is described gender as a social process where some activities are more masculine or feminine[2]. There are traits desirable for one gender but not the other; assertiveness is a typical male characteristic whereas empathy is a desirable female characteristic. Through experiences in childhood, females learn to give more value to nurturance and interpersonal interconnectedness than males do.[3]

In female brains, certain areas of emotional processing are larger than the corresponding areas in males. And besides males and females are different in cerebral processing of emotions giving rise to the differences in EI[2].

Although emotion and cognition were considered to be separate aspects of the psychiatry in the past, researchers today have demonstrated the existence of an interplay between the two processes.

Emotional intelligence (EI), or the ability to perceive, use, understand, and regulate emotions, is a relatively young concept that attempts to connect both emotion and cognition. While EI has been demonstrated to be positively related to well-being, mental and physical health, and non-aggressive behaviors, little is known about its underlying cognitive processes[4].

Despite the crucial role that emotions play in our lives, their mechanics are still not properly understood. What is accepted in the research community is that emotions imply physiological, cognitive, and behavioral changes as well as those they have both positive and negative valences[5].

Emotions and cognition have been understood to be different, and even incompatible, aspects of the human psyche in the past. Nonetheless, today the scientific evidence shows that. Emotions have an important influence on our cognitive processing, and that a balance between cognition and emotion could be the best strategy for correct environmental and social adaptation[4].

EI could favor to manage, in a more proper way, our cognitive resources. For instance, training EI abilities may help to diminish the negative bias of depressed people towards neutral stimuli and of non-depressed people after a negative mood induction by perceiving emotions and situations in a more positive way[6]. Also Stress and coping have been identified as important variables affecting health. The way in which people manage stress can both reduce and enhance the effects of stressful life events and adverse conditions.

Evidence indicates that psychosocial stress might play an important role in the onset and course of BD. According to a recent path physiological model of BD, coping abilities might play a role in modulating the relationship between stress and episodic recurrence, which can be directly affected by neurofunctional and neurostructural damage associated with a recurrent course of BD[7].

Psychosocial interventions as an adjunct to the efficacy of medication suggests that adjunctive psychological treatment can improve specific illness outcomes, but such interventions should be applied as early as possible and should be tailored to the specific needs of the patient. Most psychosocial interventions involve the integration of cognitive, behavioral, and biological components to help patients cope with life's demands[8].

However, there is a paucity of research on the coping strategies used by poorly adherent patients with BD in self-managing their chronic illness. To help address this gap, the present study assessed perceived coping strategies for the self-management of BD

Two categories of coping behavior have often been referred to in the literature: problem-focused and emotion-focused coping[9]. Problem-focused coping, including planning and active coping, has been defined as behavioral and cognitive efforts to alter or eliminate a stressor. In contrast, emotion-focused coping, which is generally considered to be less effective than problem-focused coping, is aimed at changing emotional responses to the stressor.

Women tend to use emotion-focused coping strategies to manage stressors that are more associated with depression than men. The literature has shown that women who use more emotion-focused coping styles in response to stressors report more depressive and anxiety-related symptoms compared with women who use these methods less often[10].

It was seen that women on the use of particular negative cognitive styles (i.e., patterns of thought processes often used as methods of coping in response to stress and emotional situations, such as cognitive avoidance and ruminative tendencies) provides additional information on the nature of sex differences in stress responsivity and the occurrence of depressive and anxiety symptoms[11].

For instance, patients who respond to stress with negative cognitive report more depressive symptoms compared with others who use the same cognitive styles. It was also found that cognitive avoidance was significantly related to increases in anxiety and depressive symptoms over time in women, but not in men. However, though these studies indicate that women with particular negative cognitive response styles to stress have more depressive symptoms compared with other women and men, few studies have addressed similar moderated relationships between biological sex and emotion-focused coping methods such as venting, self-blame, use of emotional support, and positive reframing.

Due to the strong association between these coping styles and negative affect, women who use these emotion-focused methods of coping might be at particular risk for higher levels of depressive symptoms compared

with men who endorse similar levels of emotion-focused coping and women who use these coping strategies less frequently. These sex differences in handling stressful situations could constitute a vulnerability that puts women at risk for developing clinical levels of depression[10].

AIMS AND OBJECTIVES

1. To compare emotional intelligence among both males and females of bipolar depressive disorder.
2. To compare the various coping strategies among both males and females of bipolar depressive disorder.

REVIEW OF LITERATURE

EMOTIONAL INTELLIGENCE

Emotional intelligence affects: a) one's performance at work b) physical health c) mental health d) relationships. Uncontrolled emotions can affect mental health by making person them more vulnerable to relapse.

The concept on Emotional intelligence is to capture the individual differences in extent to which people experience, understand regulate and utilize their emotions. Accordingly, Emotional intelligence has been measured using personality like questionnaires.

In Emotional Intelligence models, emotion related self perceptions have been repeatedly shown to form four interrelated factors: well being, self control (regulation of emotions and impulses), emotionality (perception and expression of emotions) and sociability (pertaining to interpersonal utilization and management of emotions) [12].

A recent review and Meta analysis of research discussed how to construct emotional intelligence is particularly useful in capturing individual differences in emotion regulation.

High Emotional Intelligence regulates their emotions in flexible manner (i.e., they can recognize when emotions are informative and when they have to be regulated) and in a way that is consistent with their goals as well as adaptive (i.e., maximizing long term survival and welfare). This review also showed that emotional intelligence is positively linked to functional coping strategies (problem solving, social support seeking and reappraising) and negatively linked to dysfunctional strategies (inhibition of emotional expression) welfare[13].

Coping strategies or mechanisms are remedial actions undertaken by people whose survival and livelihood are compromised or threatened. Coping strategies encompass combinations of thoughts, beliefs and behaviors that result from experience of stress.

The most common type of coping strategies includes problem- focused coping and emotion focused coping. In a study it was found, it was found

that the control group employed coping mechanisms of self control seeking social support, accepting responsibilities, planful problem solving. The negative strategies were escaping, avoidance and distancing was used to greater extent[14].

Problem focused coping is aimed at reducing the demand of stressful situation or expanding the resources to deal with it. It involves direct confrontation with stressor either through direct action or through realization of specific problem-solving activities. The focus is how to deal with agents that induce stress. Emotion focused coping aims at controlling the emotional response to stressful situation. People regulate emotional response through behavior approaches. In emotion focused coping the individual tries to change his feelings and thought about it.

Numerous studies have been done before to know relationship between emotional intelligence and depression. One study done in 2016 support the role of emotional intelligence suggesting that distancing and escaping may be a way of decreasing negative emotions that are exacerbated by maladaptive emotional coping strategies such as self blame and helplessness[15].

Similar study done in Australia, it was found that higher emotional intelligence would be related to decreased levels to emotional distress and to more a planful problem focused coping but to less emotion focused coping when faced with stressful situations[16].

A similar study done in India found out that females are more inclined to use more emotion-focused coping strategies (distancing, escape avoidance) compared to males. Males used more problem focused strategies (seeking social support, confronting, planful problem solving)[17].

According to review study, it was found that high Emotional Intelligence are associated with coping strategies based on problem solving while low levels are associated with coping strategies based on avoidance.

Therefore, Emotional Intelligence plays an important role in emotional self control and individual's adaptive capacity to cope with stressful situations.

A study conducted in Cleveland USA by Blixen et al to study coping behaviors in patients of bipolar depressive disorder demonstrated that there were two major domains of coping strategies used to self-manage BD[7].

1) Problem focused

2) Emotion focused

PROBLEM FOCUSSED

Altering Lifestyle Behaviors:

Eating healthier was a coping strategy used by some respondents to improve their nutritional intake and overall health and others exercised to improve mobility and flexibility

Keeping to a schedule

Taking mood-stabilizing medications at the same times every day was a coping strategy used by some respondents

c) Seeking knowledge on Depressive Disorder

Increasing knowledge about Bipolar Depressive Disorder, either by reading the instructions that came with their medications, or using the internet, was reported as being helpful in coping with managing

d) Socializing

Socializing with family and friends was a conscious effort by some to cope with the isolation that often comes with Bipolar Depressive Disorder

e) Self-monitoring

Monitoring their thoughts and actions was a coping strategy used by some respondents in facing the, sometimes, onerous task of managing. Talking to oneself about how to slow down and think things through was one method used to self-monitor behaviors and keeping a journal to keep track record of their moods and symptoms

EMOTION FOCUSSED

(Distracting activities, denial, isolation, modifying/avoiding, helping others, and seeking social)

Distracting

Respondents cited many coping strategies that helped in distracting them from the stress associated with self-managing their chronic mental illness. Some respondents cited spiritual domains, such as praying, meditation, and thinking positively as helping them cope.

Keeping busy

Playing music, reading, or watching TV were cited as coping strategies that helped respondent distract them from thinking about their illness

c) Distancing

Some respondents, however, used denial as a coping strategy to distance themselves from the stress associated with their illness and some preferred Isolation

In summary, the emotion-based coping strategies used by respondents to distract themselves from the stresses associated with managing BD, included spiritual or religious domains, as well as solitary activities that kept them feeling “focused and normal”.

Although denial, isolation, and avoidance were used by some as coping strategies to distance themselves from stressful situations, others cited helping others and seeking support from friends, families, and support groups, as helpful in coping with their mental illness.

In the study, women adopted more coping strategies such as self-blame. Self-blame items involved criticizing and blaming oneself for things that happened. This could lead to guilty feeling and finally might end up in relapse.

Similar study was carried out by Kelly et al., to explore the coping strategies in depressed patients between both genders. Greater emotional reaction to depression with maladaptive coping was more for women and men and women showed additional relationships between greater perceived control over depression and more adaptive coping techniques as well as between perception of consequences of depression and problem solving[10].

A study carried out by Megan et al., to examine sex differences in the use of coping strategies and their relationship to depression, the results demonstrated that women who used less positive reframing had higher levels of depressive symptoms compared to men irrespective of their use of more or less positive reframing[10].

It has been hypothesized that differences in the way women cope with stress could be related to their higher levels of psychological distress, symptoms of depression with men and may be related to sex differences in the prevalence of depression. Indeed, several studies have found that women tend to use coping strategies that are aimed at changing their emotional responses to a situation, whereas men use more problem-focused or instrumental methods of handling stressful experiences[18].

Another study was conducted by Gerber et al., to investigate coping strategies in men and women in depressive disorder patients. The analyses revealed that compared to men, women display higher interpersonal sensitivity and use internalized shaming coping strategies[19].

A similar study was carried out by Howerton et al., in Miami, Florida to examine sex differences in coping styles for depressed mood[20]. They examined the extent to which there were sex differences in 3 coping style types: problem focused, emotion focused, and avoidance focused (Endler & Parker, 1990)[9]. And they further examined the extent to which sex differences in coping styles could be explained by sex differences in chronic strain; the extent to which sex differences in depressed mood could be explained by sex differences in coping style; and whether the effects of different coping style types on depressed mood varied by sex.

Results suggested somewhat complex relationships among sex, coping, chronic strain, and depression. No sex differences in the use of problem-focused coping were observed however, women more often used avoidance-focused techniques.

Although female respondents more often used emotion-oriented strategies compared to male respondents, such use did not prove to be

fundamentally harmful for women. In fact, the effects of using emotion-focused strategies, such as the expression of feelings, reduced depressed mood for women, but not for men.

Another study was conducted by Takahashi et al., in Japanese population to assess coping strategies in depression. It was found that depression was associated positively with avoidant strategies but negatively with problem solving strategies indicates that individual stress-coping strategies have their own significance with respect to depression, and may be utilized in establishing an evidence-based cognitive behavioral approach to depressive patients[21].

A study was carried out in Spain to assess gender difference in coping strategies to stress and depression. It was found that women scored significantly higher than men in emotional and avoidance coping styles, while scored lower in rational and detachment coping styles. Although the magnitude of differences is moderate to small, several investigators have found that men made more frequent use of instrumental coping and women were more likely to use emotion-focused coping[22].

Another similar study was conducted in India by Manjula et al., to assess interepisodic functioning, coping strategies in patients of bipolar. It was found that better functioning group had better scores on active coping, positive reframing, planning, and acceptance coping dimensions. Problem focused coping was found to be an effective coping style in improving mood and self-esteem; thus were found to improve functioning[23].

MATERIALS AND METHODS

Source of Data

The study included the patients who came for follow up in psychiatry opd in DMC & Hospital, Ludhiana

Method of Collection of Data

- **Inclusion Criteria**

1. Patients meeting criteria of DSM V bipolar depressive disorder
2. Age 18-60years
3. HAM-D score <20
4. Willing to give informed consent

- **Exclusion Criteria**

1. Psychiatric co-morbidity
2. Age <18 years, >60years
3. Substance use (except tobacco)
4. Intellectual disability

Patients who met the required inclusion and exclusion criteria for the study, and were willing to give informed consent, were recruited.

This cross-sectional study was conducted on a total of 150 stable subjects who came on follow up in Psychiatry OPD of Dayanand Medical College & Hospital, Ludhiana.

The sample was divided into 3 groups: Males with bipolar depression (n=50), Females with Bipolar Depression (n=50) and Healthy Control (50), age matched.

Socio demographic Performa were filled containing basic information about subjects.

The subjects were evaluated on their symptoms by using HAM-D scale[23], coping strategies by using Brief Cope Questionnaire[24], Emotional Intelligence By Mangal Emotional Intelligence Inventory[25].

Statistical Analysis

The recorded data was compiled and entered in a spreadsheet computer program (Microsoft Excel 2010) and then exported to data editor page of SPSS version 20 (SPSS Inc., Chicago, Illinois, USA).

Descriptive statistics included computation of percentages, means and standard deviations were calculated. The statistical tests applied for the analysis were chi-square test and Independent sample t-test. For both the tests, confidence interval and p-value were set at 95% and ≤ 0.05 respective.

OBSERVATIONS AND RESULTS

Table 1: Distribution of gender in terms of number

Gender	N	Mean	Std. Deviation
Female	75	36.8	10.81005
Male	75	37.28	10.20412
Total	150	37.04	10.46101
t-value	-0.228		
p-value	0.820 (NS)		

Figure 1: Distribution of gender in terms of number

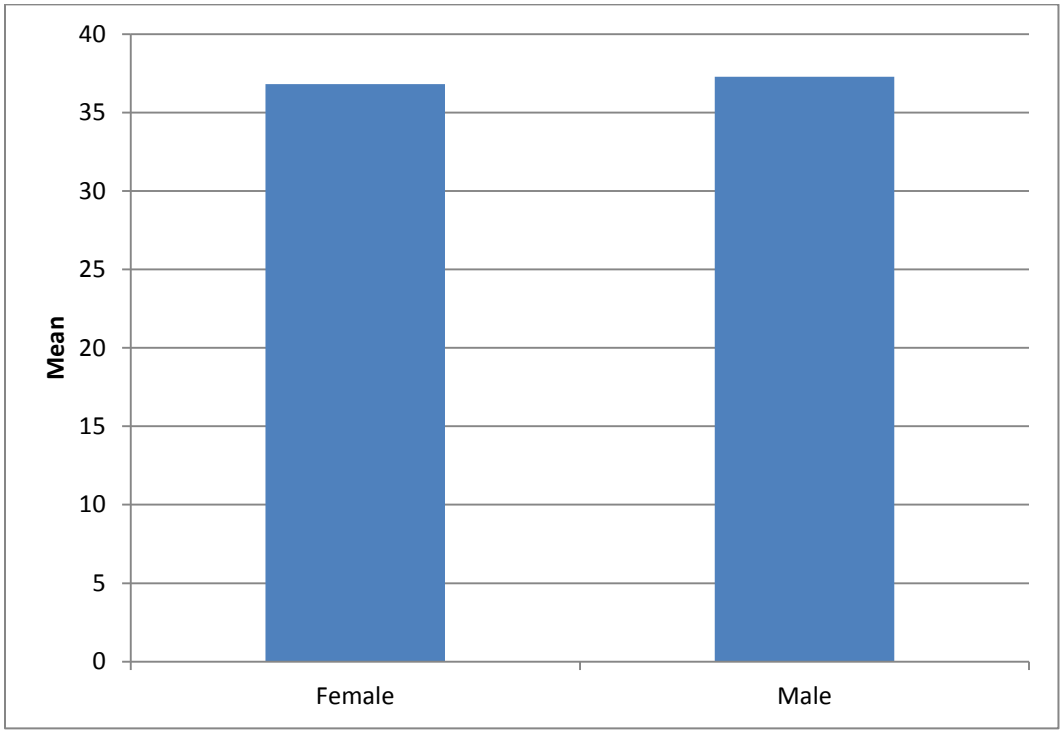


Table 2: Distribution of the participants in terms of patient age (n=150)

Age (Years)	Gender		Total
	Female	Male	
21-30	36%	38%	37.00%
31-40	28%	24%	26.00%
41-50	26%	22%	24.00%
51-60	10%	16%	12.00%
Total	75	75	150
	100.00%	100.00%	100.00%
Chi-square	2.681		
p-value	0.613 (NS)		

Figure 2: Distribution of the participants in terms of patient age (n=150)

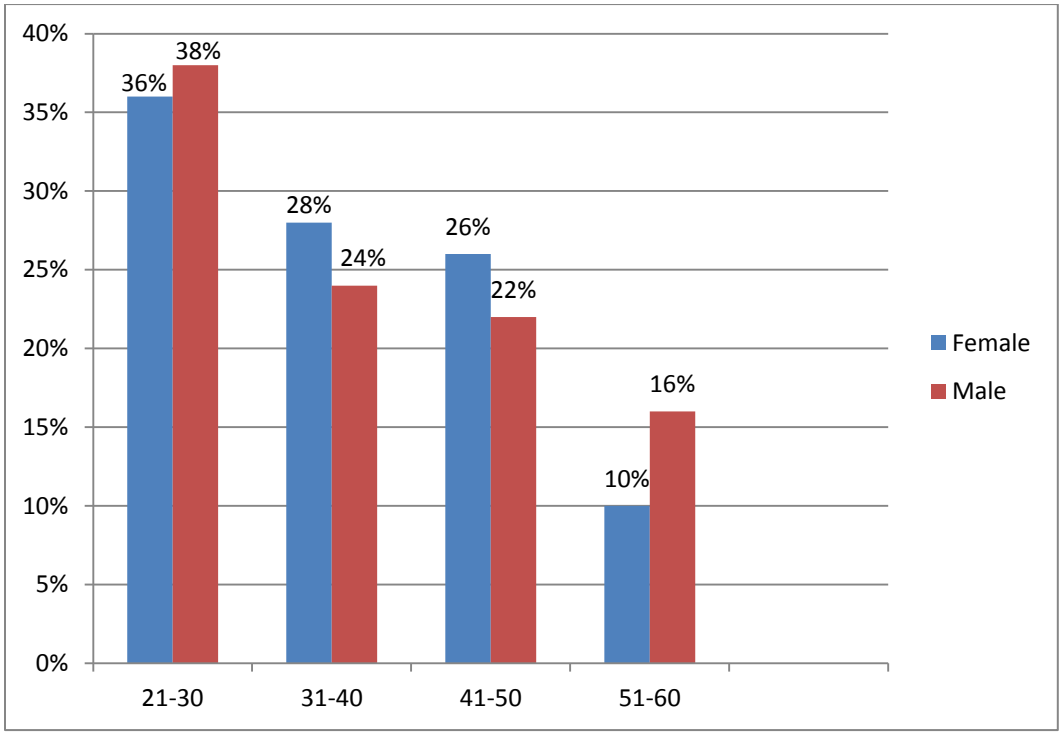


Table 3: Distribution of genders in terms of rural and urban location

Count of RURAL/URBAN	RURAL/URBAN		
GENDER	RURAL	URBAN	Grand Total
Female	20.00%	30.00%	50.00%
Male	21.33%	28.67%	50.00%
Grand Total	41.33%	58.67%	100.00%

Figure 3: Distribution of genders in terms of rural and urban location

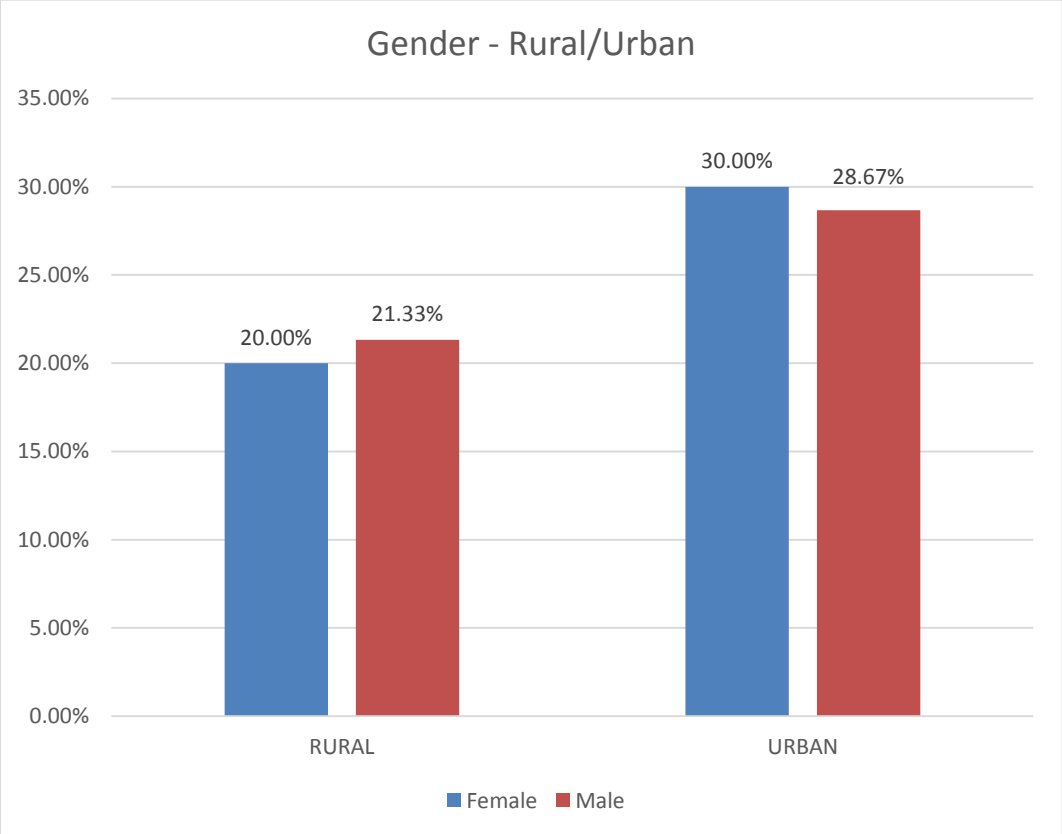


Table 4: Distribution of both genders in terms of family type

Count of FAMILY	FAMILY		Grand Total
GENDER	JOINT	NUCLEAR	
Female	33.33%	16.67%	50.00%
Male	34.00%	16.00%	50.00%
Grand Total	67.33%	32.67%	100.00%

Figure 4: Distribution of both genders in terms of family type

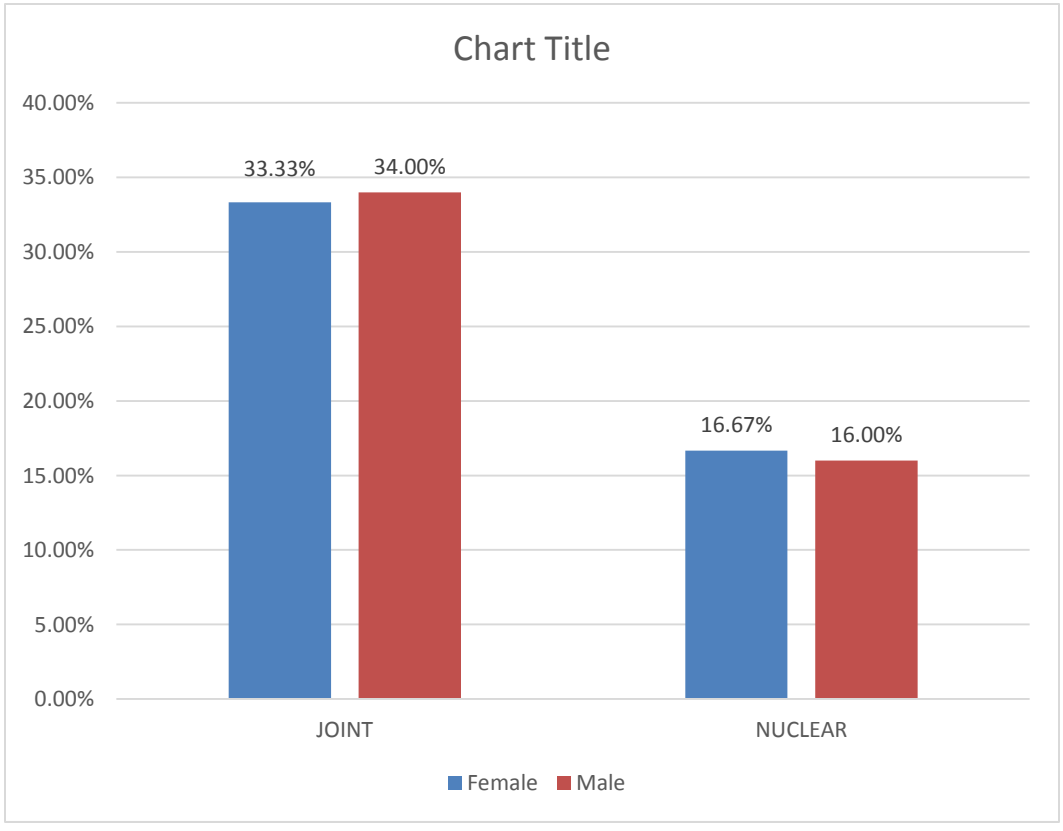


Table 5: Distribution of genders in terms of education

Education status	Gender		Total
	Female	Male	
Graduate	16%	28%	22.00%
Higher Secondary	24%	40%	32.00%
Matriculation	36%	20%	28.00%
Primary	22%	8%	15.00%
Uneducated	2%	4%	3.00%
Total	75	75	150
	100.00%	100.00%	100.00%
Chi-square	9.522		
p-value	0.049 (Sig.)		

Figure 5: Distribution of genders in terms of education

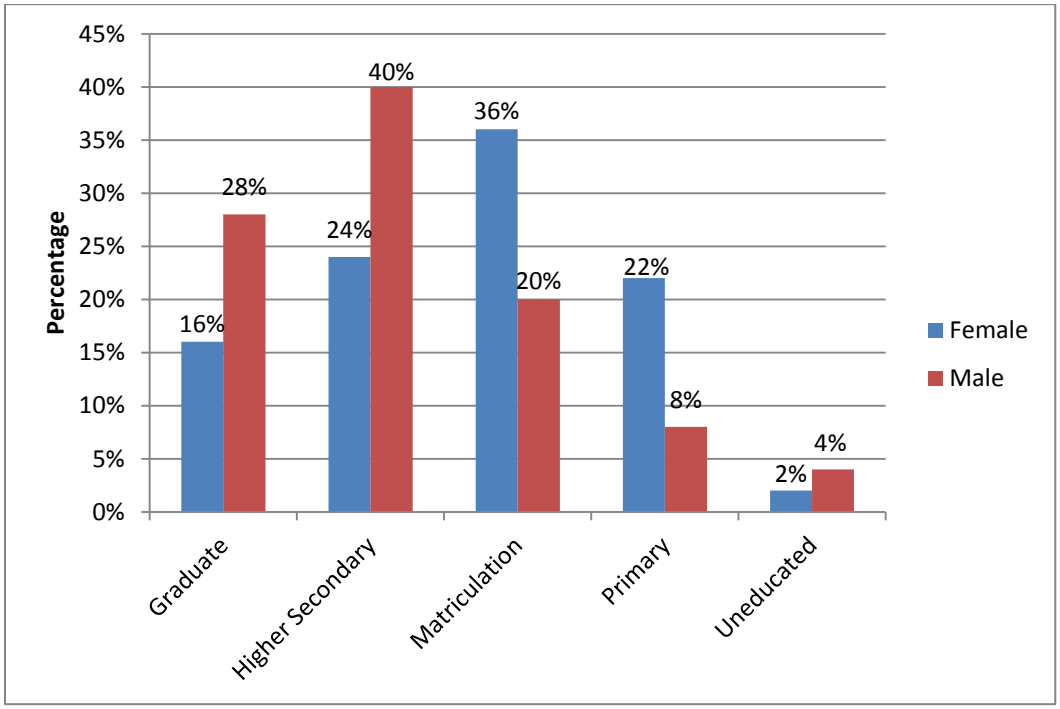


Table 6: Distribution of both genders in terms of HAM-D (Mean) score

HAM-D	Gender	N	Mean	Std. Deviation
	Female	75	26.14	3.36858
	Male	75	24.32	3.62215
t-value		2.602		
p-value		0.011 (Sig.)		

Figure 6: Distribution of both genders in terms of HAM-D (Mean) score

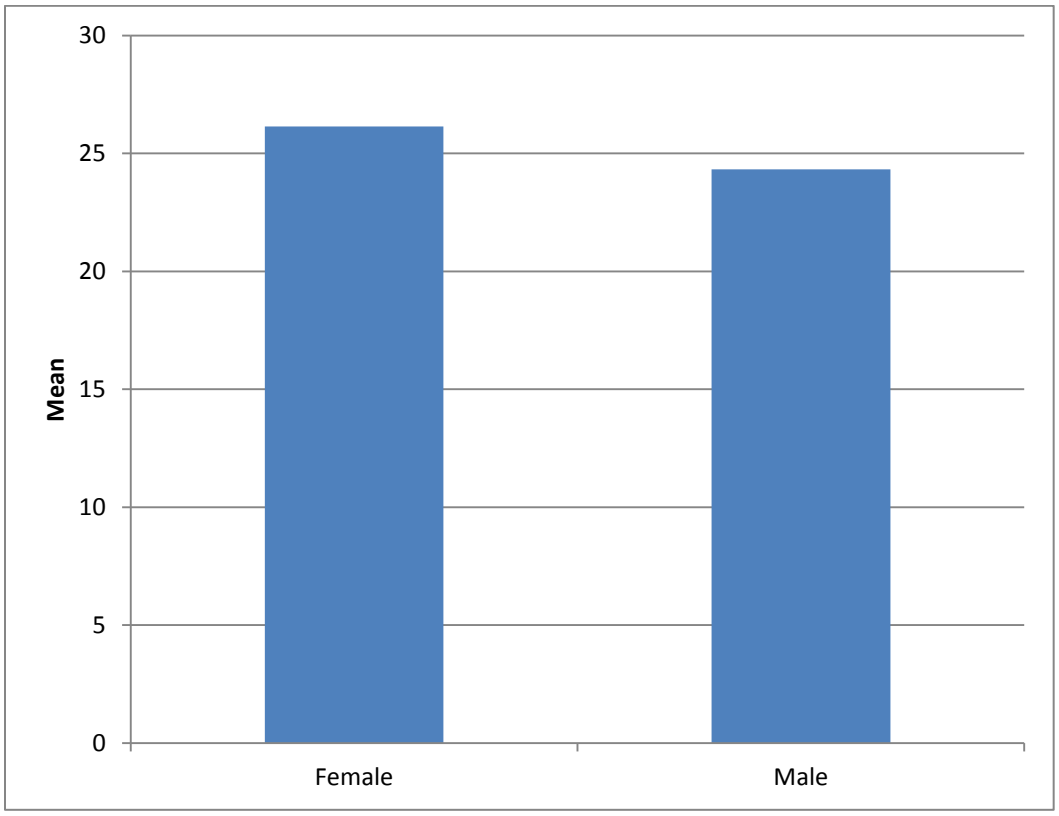


Table 7: Comparison of gender difference HAM-D score (percentage wise) between urban and rural subjects

HAM-D	RURAL/URBAN		Grand Total
GENDER	RURAL	URBAN	
Female	19.47%	29.69%	49.16%
Male	20.39%	30.45%	50.84%
Grand Total	39.86%	60.14%	100.00%

Figure 7: Comparison of gender difference of HAM-D score (percentage wise) between urban and rural subjects

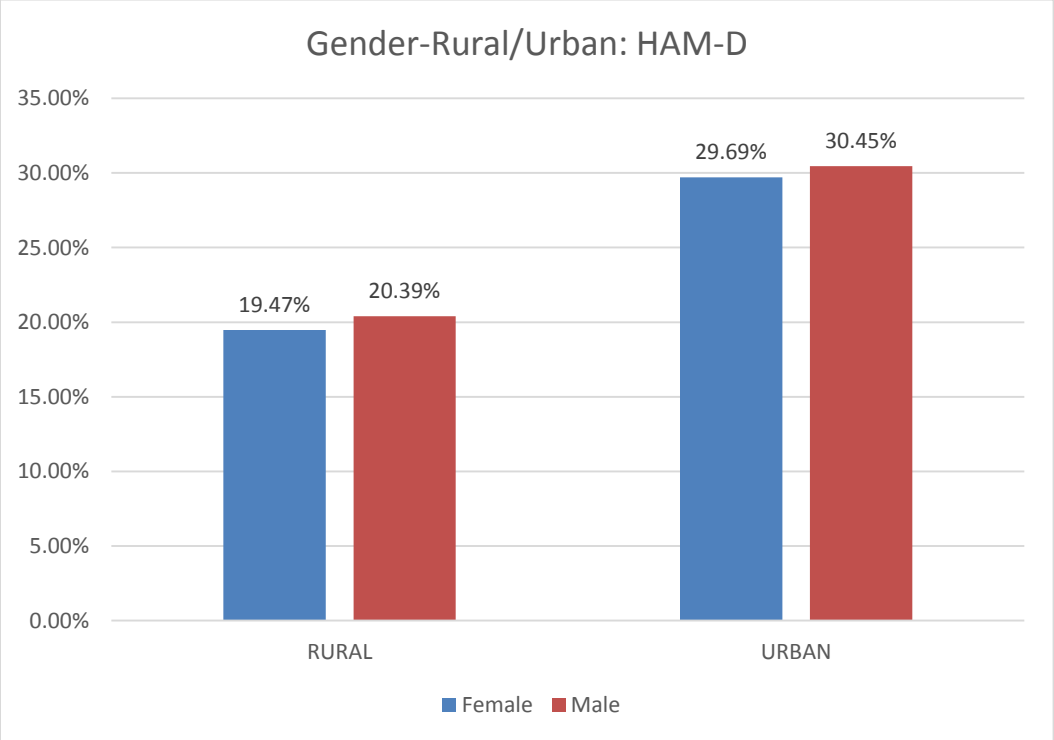


Table 8: Gender comparison of coping strategies

Parameters	Gender				t-value	p-value
	Female	Std. Deviation	Male	Std. Deviation		
Distraction	2.32	0.76772	2.72	1.14357	-2.054	0.043 (Sig.)
Active coping	2.1	0.81441	2.54	1.07305	-2.31	0.023 (Sig.)
Denial	1.42	0.49857	1.14	0.45221	2.941	0.004 (Sig.)
Emotional support	3.52	0.61412	1.68	0.68333	14.162	0.001 (Sig.)
Venting	3.58	0.60911	1.66	0.74533	14.104	0.001 (Sig.)
Positive Reframing	2.76	0.65652	1.48	0.61412	10.068	0.001 (Sig.)
Humor	1.4	0.49487	2.5	0.99488	-7	0.001 (Sig.)
Religion	3.26	0.82833	2.28	0.7835	6.078	0.001 (Sig.)
Self-Blame	2.48	1.0349	1.6	0.98974	4.345	0.001 (Sig.)
Acceptance	2.86	0.67036	2.98	0.62237	-0.928	0.356 (NS)
Planning	1.66	0.68839	3.08	0.56569	-11.269	0.001 (Sig.)

Figure 8: Gender comparison of coping strategies

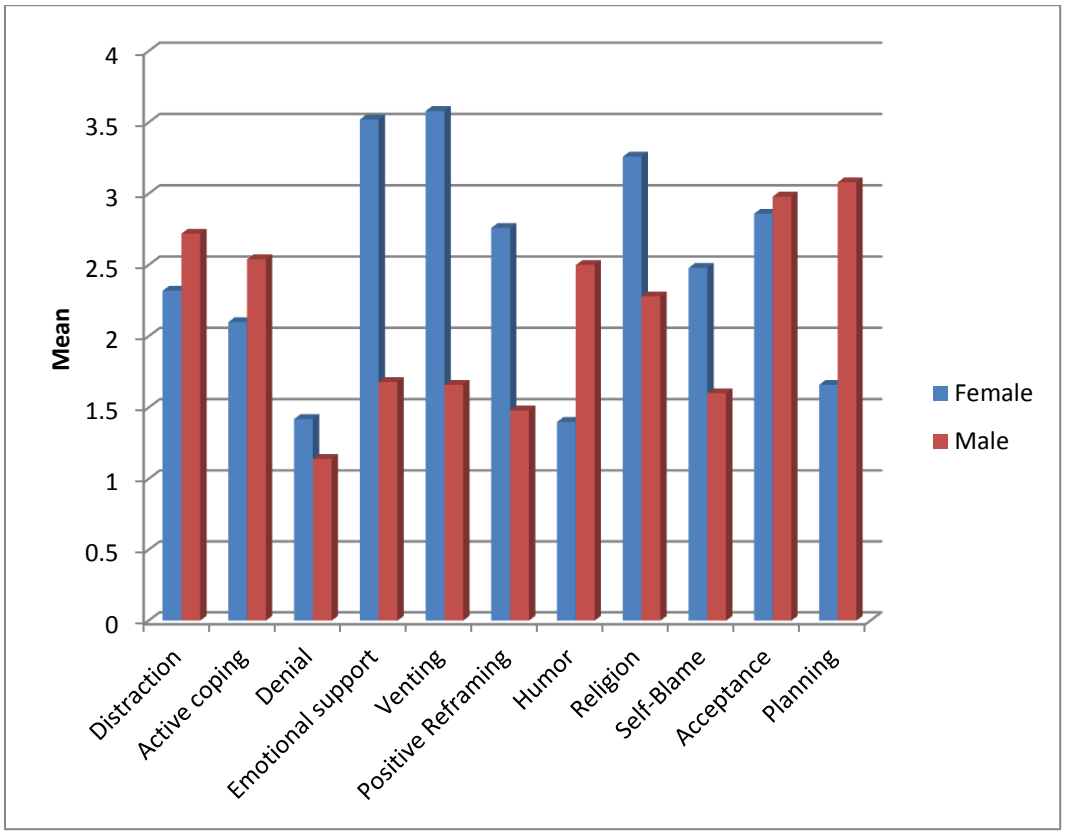


Table 9: Gender comparison of Intra personal awareness

Intra-personal awareness	Gender	N	Mean	Std. Deviation
	Female	75	15.24	2.97308
	Male	75	13.14	2.04051
t-value	-4.118			
p-value	0.001 (Sig.)			

Figure 9: Gender comparison of Intra personal awareness

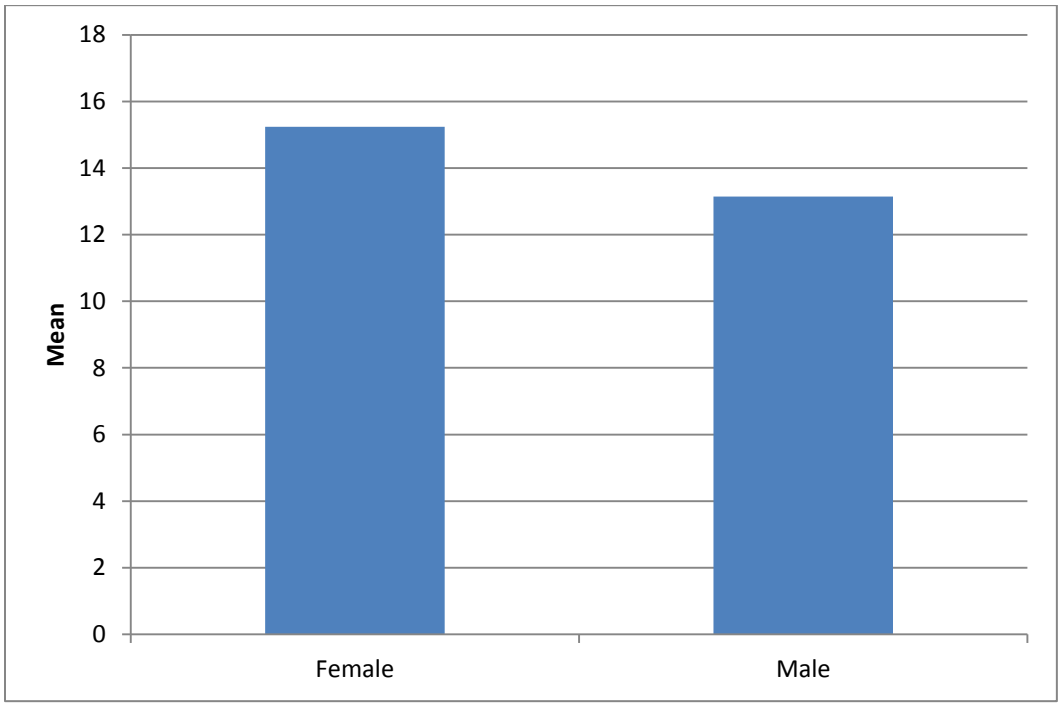


Table 10: Distribution of both genders according to intra personal awareness score (percentage wise)

Intra-personal awareness	Gender		Total
	Female	Male	
AVERAGE	50%	20%	35.00%
GOOD	0%	2%	1.00%
POOR	50%	70%	60.00%
VERY POOR	0%	8%	4.00%
Total	75	75	150
	100.00%	100.00%	100.00%
Chi-square	13.095		
p-value	0.004 (Sig.)		

Figure 10: Distribution of both genders according to intra personal awareness score (percentage wise)

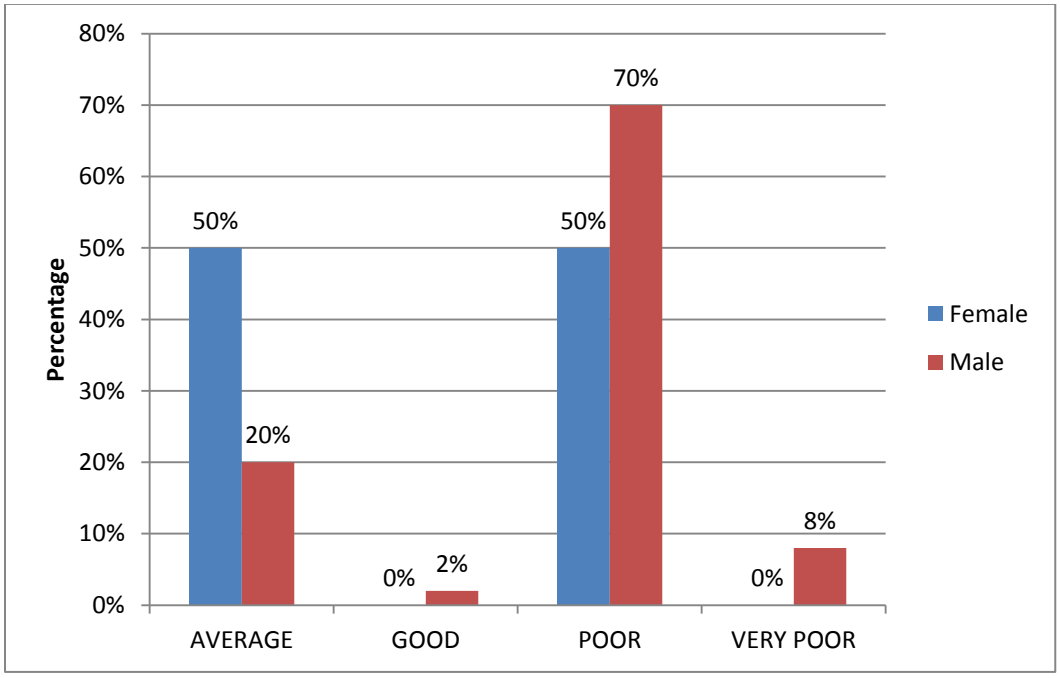


Table 11: Distribution of both genders according to inter personal awareness

Inter-personal awareness Score	Gender	N	Mean	Std. Deviation
	Female	75	15.78	3.13173
	Male	75	13.42	2.3043
t-value	-4.292			
p-value	0.001 (Sig.)			

Figure 11: Distribution of both genders according to inter personal awareness

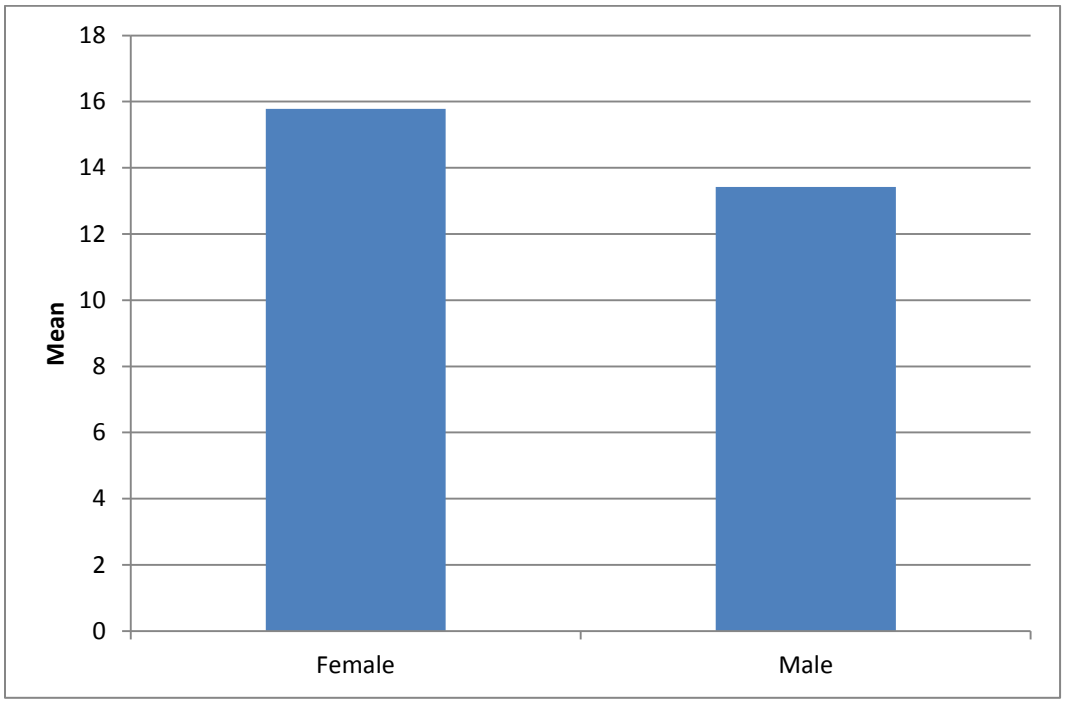


Table 12: Distribution of both genders according to inter personal awareness score (percentage wise)

Inter-awareness Description	Gender		Total
	Female	Male	
AVERAGE	46%	30%	38.00%
GOOD	6%	0%	3.00%
POOR	48%	66%	57.00%
VERY POOR	0%	4%	2.00%
Total	75	75	150
	100.00%	100.00%	100.00%
Chi-square	8.105		
p-value	0.044 (Sig.)		

Figure 12: Distribution of both genders according to inter personal awareness score (percentage wise)

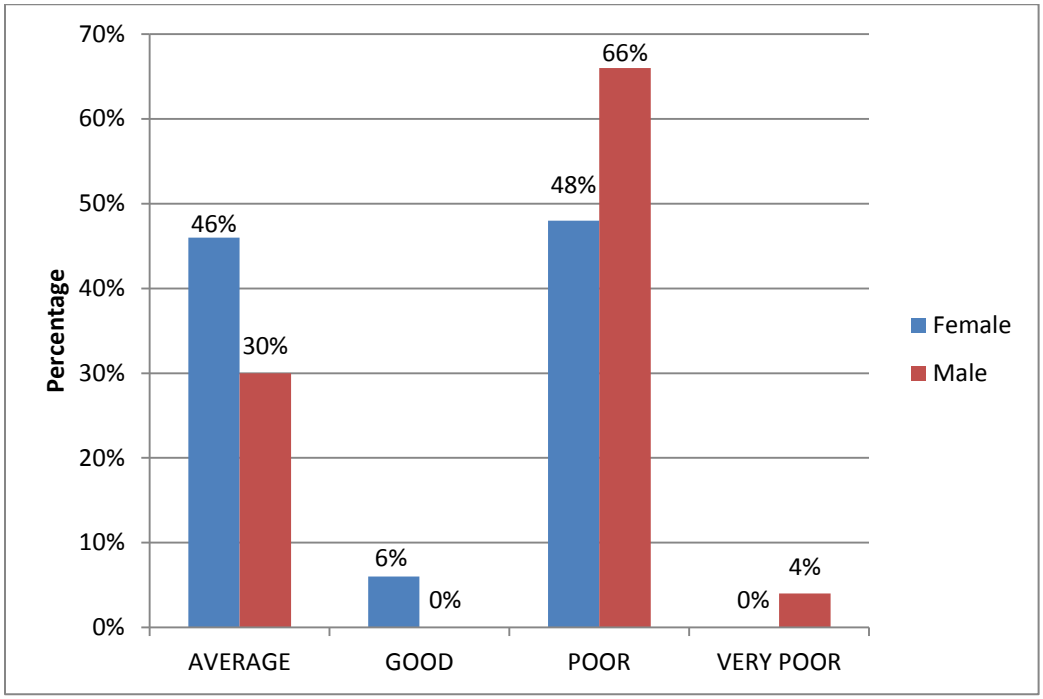


Table 13: Gender comparison in intra personal management score (mean)

Intra-personal management Score	Gender	N	Mean	Std. Deviation
	Female	75	18.44	2.61206
	Male	75	15.16	3.53617
t-value	-5.276			
p-value	0.001 (Sig.)			

Figure 13: Gender comparison in intra personal management score (mean)

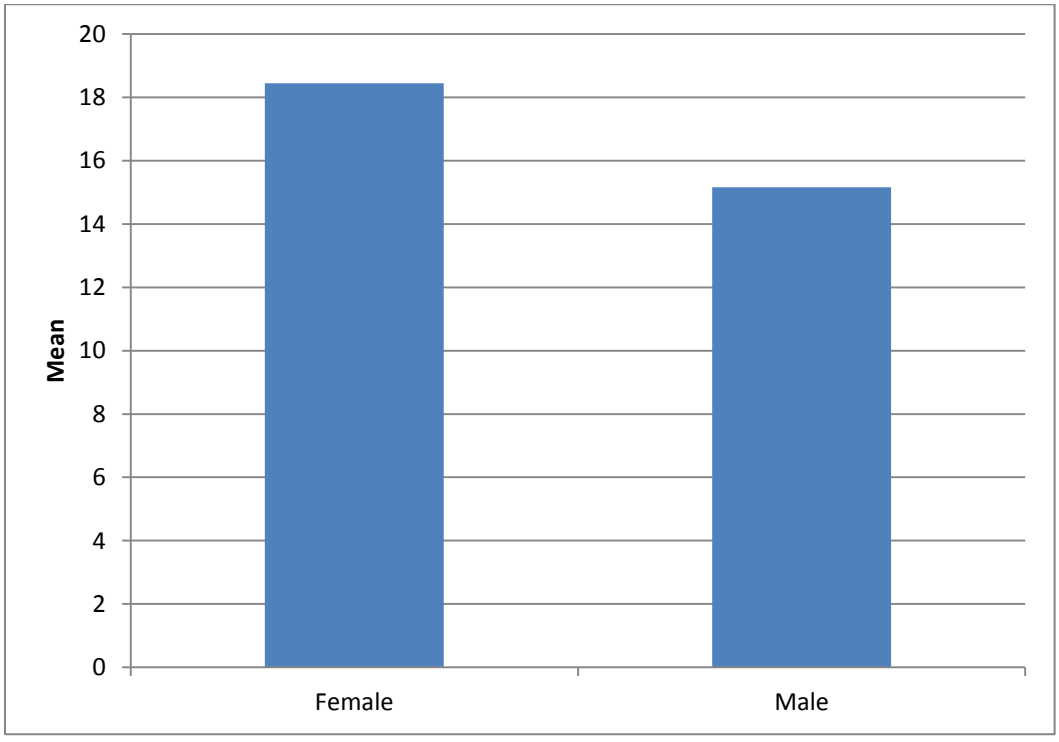


Table 14: Distribution of both genders according to intra personal management score (percentage wise)

Intra-personal management Description	Gender		Total
	Female	Male	
AVERAGE	54%	42%	48.00%
GOOD	30%	0%	15.00%
POOR	16%	54%	35.00%
VERY POOR	0%	4%	2.00%
Total	75	75	150
	100.00%	100.00%	100.00%
Chi-square	28.064		
p-value	0.001 (Sig.)		

Figure 14: Distribution of both genders according to intra personal management score (percentage wise)

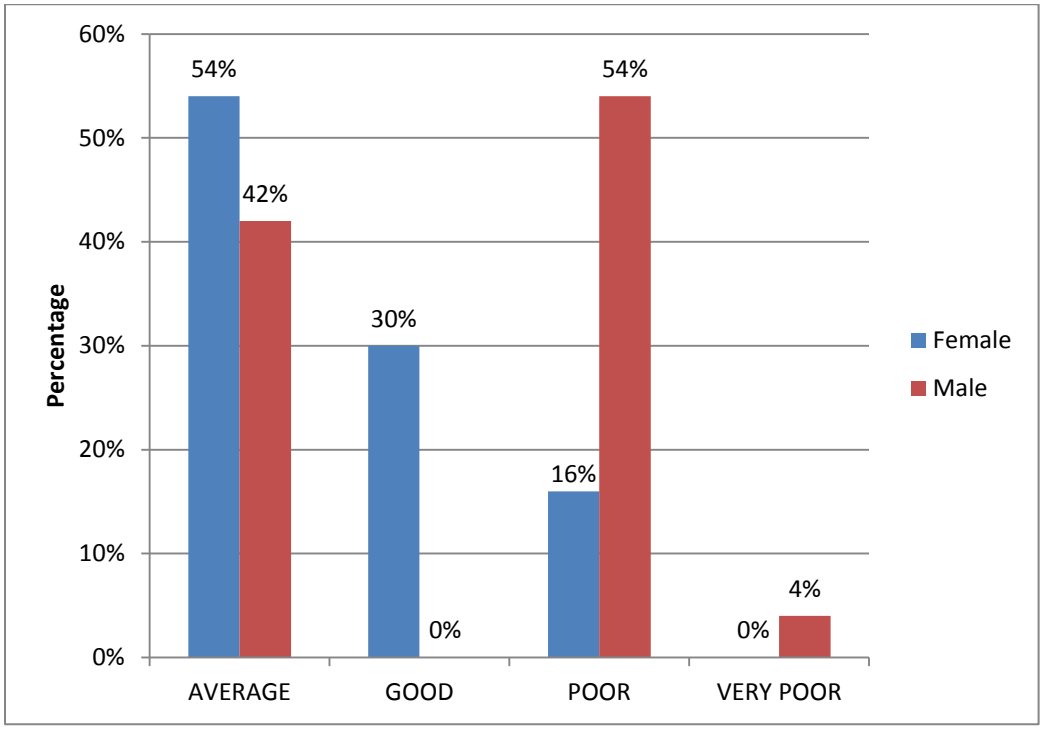


Table 15: Gender comparison according to interpersonal management score (mean)

Inter-personal management Score	Gender	N	Mean	Std. Deviation
	Female	75	18.34	2.19098
	Male	75	15.1	2.80124
t-value	-6.442			
p-value	0.001 (Sig.)			

Figure 15: Gender comparison according to interpersonal management score (mean)

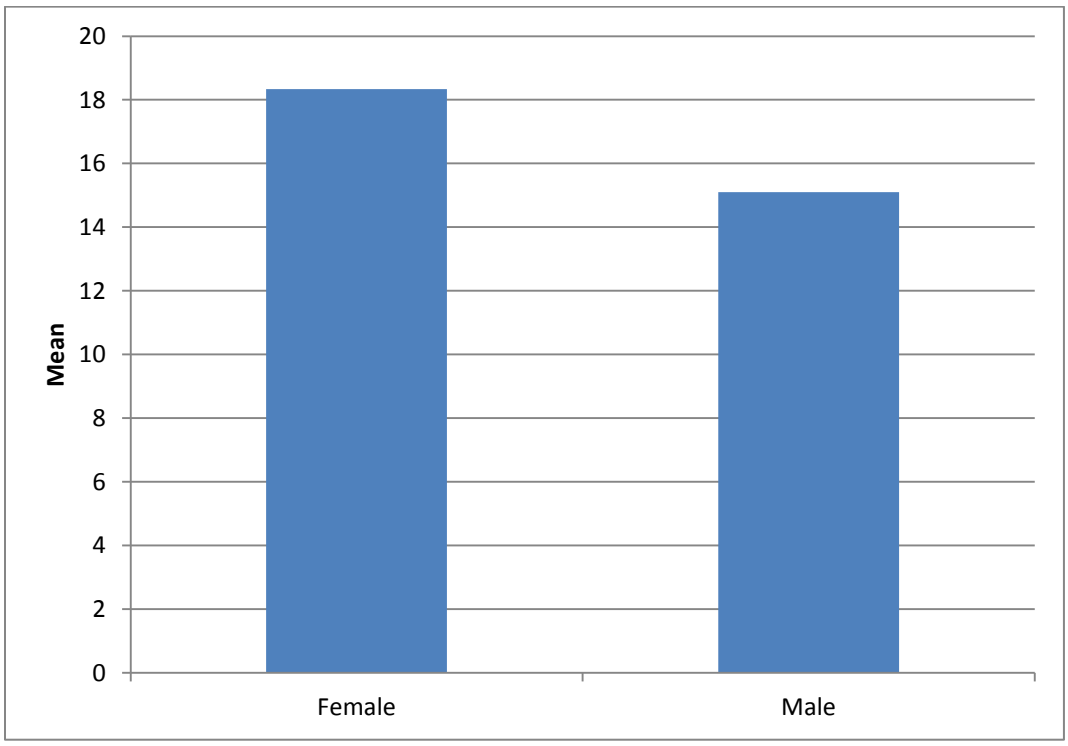


Table 16: Distribution of both genders according to inter personal management score (percentage wise)

Inter-personal management Description	Gender		Total
	Female	Male	
AVERAGE	60%	32%	46.00%
GOOD	26%	6%	16.00%
POOR	14%	46%	30.00%
VERY POOR	0%	16%	8.00%
Total	75	75	150
	100.00%	100.00%	100.00%
Chi-square	27.044		
p-value	0.001 (Sig.)		

Figure 16: Distribution of both genders according to inter personal management score (percentage wise)

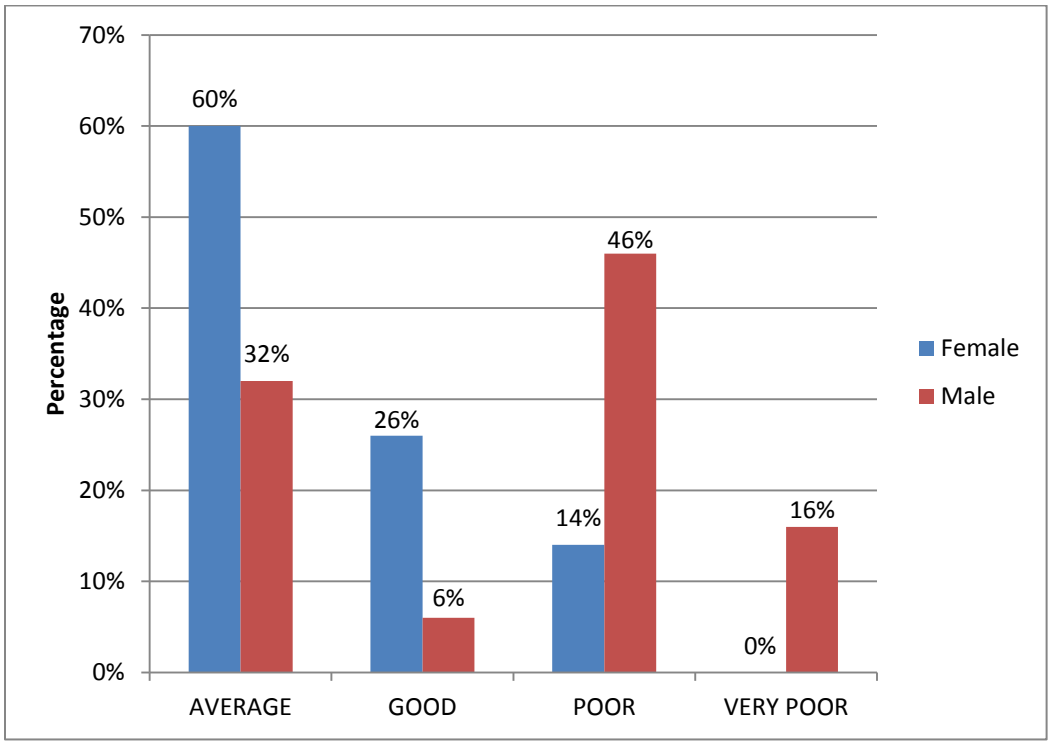


Table 17: Gender comparison of emotional intelligence (mean)

	Gender	N	Mean	Std. Deviation
Total Score	Female	75	67.76	8.26243
	Male	75	56.72	8.0103
t-value	-6.784			
p-value	0.001 (Sig.)			

Figure 17: Gender comparison of emotional intelligence(mean)

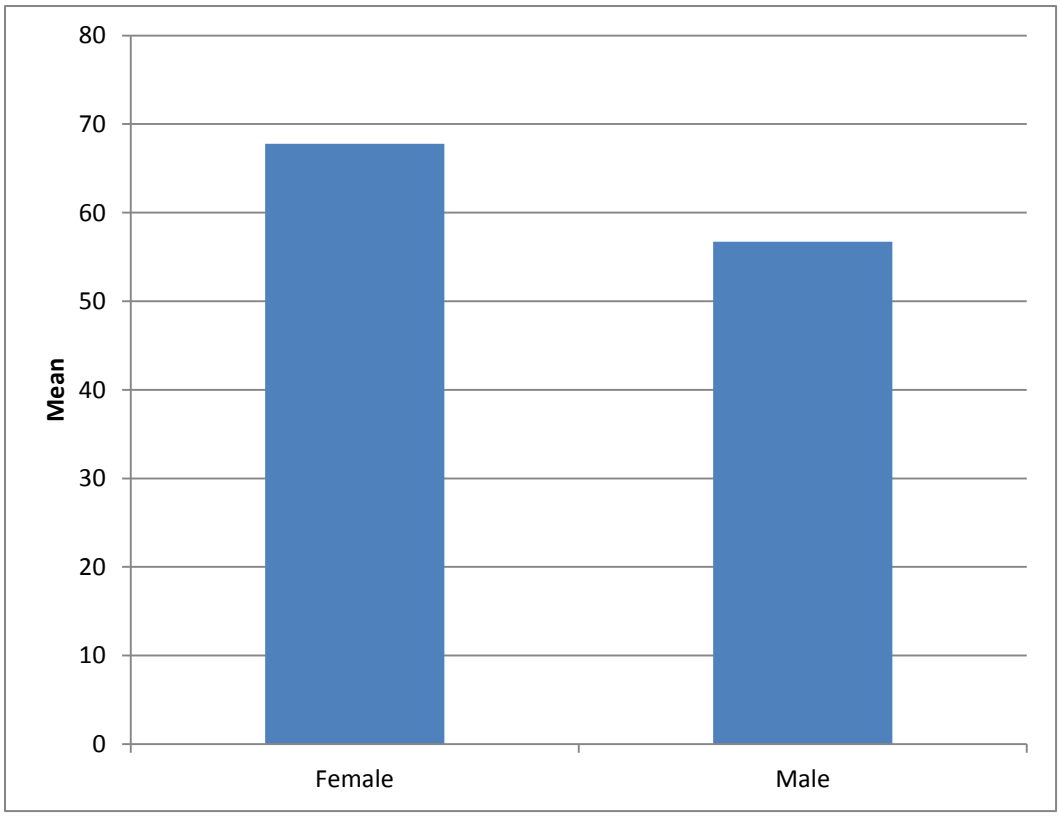


Table 18: Distribution of genders according to their emotional intelligence level (percentage wise)

Total Description	Gender		Total
	Female	Male	
AVERAGE	36%	34%	35.00%
GOOD	48%	8%	28.00%
POOR	16%	50%	33.00%
VERY POOR	0%	8%	4.00%
Total	75	75	150
	100.00%	100.00%	100.00%
Chi-square	27.072		
p-value	0.001 (Sig.)		

Figure 18: Distribution of genders according to their emotional intelligence level (percentage wise)

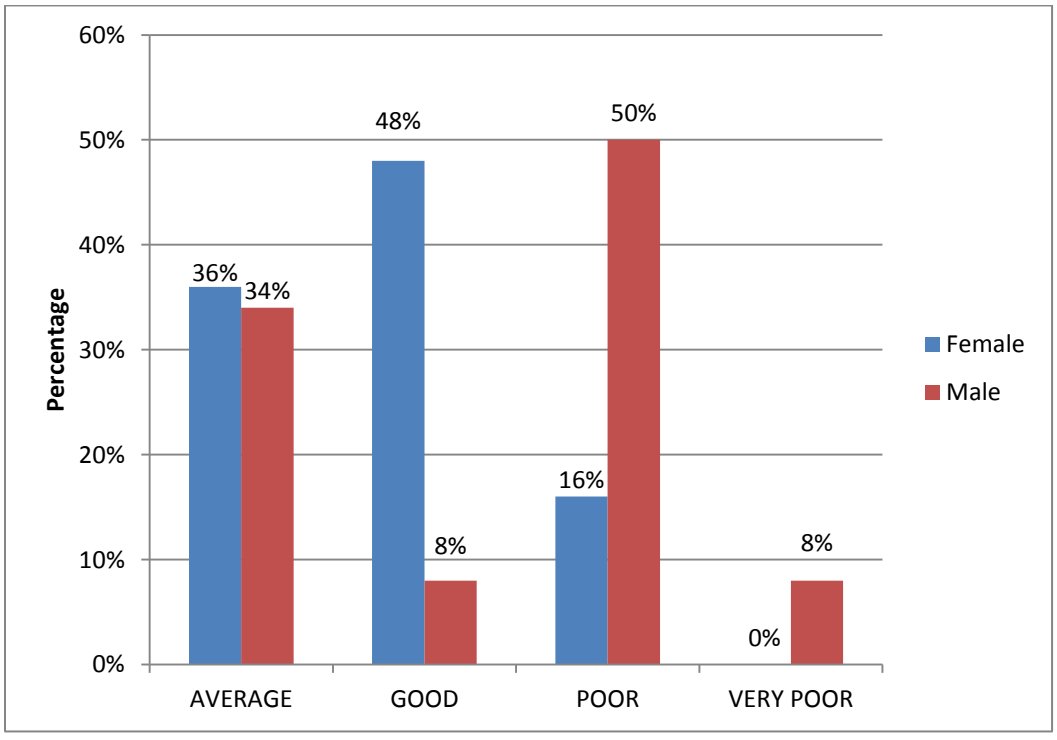
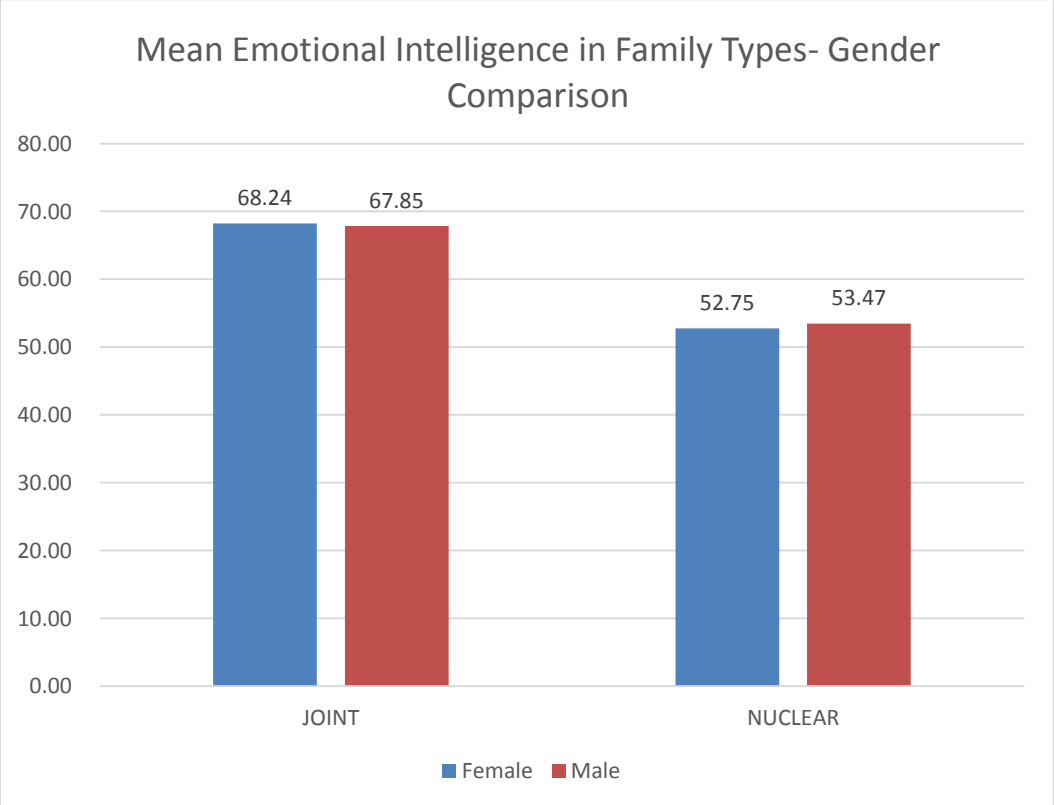


Table 19: Gender comparison of Mean Emotional Intelligence according to Family Type

Mean of EMPTIONAL INTELLIGENCE	FAMILY				Grand Total	
	JOINT		NUCLEAR			
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Female	68.24	8.25	52.75	8.63	63.28	11.04
Male	67.85	8.09	53.47	9.73	62.96	11
Grand Total	68.04	8.11	53.12	9.08	63.12	10.97

Figure 19: Gender comparison of Mean Emotional Intelligence according to Family Type



RESULTS

TABLE 1 and FIGURE 1 shows distribution of gender in terms of number 50% of the subject were females and 50% subjects were males

Table 2 and figure 2 shows distribution of both genders in terms of age 36% of the females and 38% of the males had patient age: 21-30; 28% of the females and 24% of the males had patient age: 31-40; 26% of the females and 22% of the males had patient age: 41-50; 10% of the females and 16% of the males had patient age: 51-60

Table 3 and figure 3 shows distribution of genders in terms of rural and urban location 20% females belonged to rural location, 30% belonged to urban location, 21.335 males belonged to rural location and 28.67% belonged to urban location.

Table 4 and Figure 4 shows distribution of both genders in terms of family type 33.33% females belonged to joint family, 16.67% females in nuclear family,34% males belonged to join family, 16%males belonged to joint family.

Table 5 and figure 5 shows Distribution of genders in terms of education 2.0% females and 4.0% males had Education: Illiterate. 22% females and 28% males had education: primary school, 36% females and 20% males had Education: Upto Matric. 24% females and 40% males had Education: Higher Secondary. 16% females and 28% males had Patient Education: Graduate.

Table 6 and figure 6 shows Distribution of both genders in terms of HAM-D (Mean) score Females had mean Ham-d score 26.14, males had mean Ham-d score 24.32

Table 7 and figure 7 shows Comparison of gender difference HAM-D score (percentage wise) between urban and rural subjects19.47% females belonged to rural background, 26.69% females belonged to urban background, 20.39% males belonged to urban background, 30.45% males belonged to rural background

Table 8 and figure 8 Gender comparison of coping strategies SD of females for distraction, active coping, denial, emotional support were 0.76, 0.81, 0.49, 0.61 and for males it was 1.14, 1.07, 0.45, 0.68 SD of females for venting, positive reframing, humor, religion, self blame, planning were 0.60, 0.65, 0.49, 0.82, 1.03, 0.68 respectively and for males it was 0.74, 0.61, 0.99, 0.78, 0.98, 0.56 respectively SD for acceptance in females (0.67) and males (0.62)

Table 9 and figure 9: Intra personal awareness in Emotional Intelligence had mean: 15.24 in females and 13.14 in males

Table 10 and figure 10 Distribution of both genders according to intra personal awareness score (percentage wise) 50% females, 20% males scored in the range: Average; 0% females, 2%males scored in the range: Good; 50% females, 70% males scored in the range: poor, 0% females, 8% males scored in the range: very poor.

Table 11 and figure 11: Interpersonal awareness in Emotional Intelligence had mean: 15.78 in females and 13.42 in males

Table 12 and figure 12: Distribution of both genders according to inter personal awareness score (percentage wise) 46% females, 30% males scored in the range: Average; 6% females, 0%males scored in the range: Good; 48% females, 66% males scored in the range: poor, 0% females, 4%males scored in the range: very poor.

Table 13 and figure 13 Intra personal management in Emotional Intelligence had mean: 18.44 in females and 15.16 in males

Table 14 and figure 14: Distribution of both genders according to intra personal management score (percentage wise) 54% females, 42% males scored in the range: Average; 30% females, 0%males scored in the range: Good; 16% females, 54% males scored in the range: poor, 0% females, 4%males scored in the range: very poor.

Table 15 and figure 15: Inter personal management in Emotional Intelligence had mean: 18.34 in females and 15.1 in males.

Table 16 and figure 16 Distribution of both genders according to inter personal management score (percentage wise) 60% females, 32% males scored in the range: Average; 26% females, 6%males scored in the range: Good; 14% females, 46% males scored in the range: poor, 0% females, 16%males scored in the range: very poor.

Table 17 and figure 17: Mean score Emotional intelligence in females was 67.76 and males was 56.72

Table 18 and figure 18: distribution of genders according to their emotional intelligence level (percentage wise) 36% females, 34% males scored in the range: Average; 48% females, 8%males scored in the range: Good; 16% females, 50% males scored in the range: poor, 0% females, 8%males scored in the range: very poor.

Table 19 and figure 19: Gender comparison of Mean Emotional Intelligence between Joint and Nuclear family: joint family females had mean score: 68.24, nuclear family females had mean score: 52.75, joint family males had mean score: 67.85, nuclear family males had mean score: 53.47.

DISCUSSION

The present study was carried out to find out the gender differences in Coping Strategies and Emotional Intelligence in patients of Bipolar Depressive Disorder.

It was a comparative study carried out on patients of Bipolar depression coming on follow up in tertiary care hospital and were subdivided into three equal groups of Male, Female and Healthy controls with age matched. 150 participants (50 in each group), fulfilling the laid down inclusion and exclusion criteria were recruited and assessed on socio-demographic and clinical variables as described earlier. The subjects were evaluated for emotional intelligence and coping strategies using the various screening and assessment tool namely HAM-D[24], BRIEF COPE[25], MANGAL & MANGAL EMOTIONAL INTELLIGENCE INVENTORY[26].

Socio Demographic

Age and Gender

In our study, 36.7% of the subjects were between 20-30years of age, 26% of the subjects were between 31-40 years of age and 24% of the subjects were between 41-50 years of age, 12% of the subjects were between 51-55 years of age. The age range in our study was 18-55 years. Out of 36.7% of the subjects were below 30 years in which males were 38% and females were 36%. And in the older age group 10% comprised of females and 16% comprised of males. This similar finding corresponds to study by Amy Fiske et al., studied the prevalence of depression rate in different age groups and showed that depression is less prevalent among older adults than among younger adults[27].

A study done by Lara et al., showed the rate of depressive episodes were less prevalent in older age groups than in younger adults[28]. Another study done by Kalita et al., showed that younger age group had more episodes of bipolar depression than compared to older age groups[29].

Similar Findings were seen in study done by Benazzi et al., which showed that younger adults reported more depressive episodes than older adults. This could be because depression in older adults may present somewhat differently than in younger adults. For example, older adults are less likely to endorse cognitive-affective symptoms of depression, including dysphoria and worthlessness/guilt, than are younger adults (Gallo et al., 1994). Over attributing these symptoms to the physical illness even when other mood symptoms are present represents under diagnosis. Thus most of the times depression remains under diagnosed in older adults[30].

Education

In our study only 3% of the subjects were illiterate, 15% were educated up to primary school education, 28% educated up to Matriculation, 32% were higher secondary and 22% were either Graduates or Post-graduates. Thus, in our study it was seen that 36% of subject females were educated up to matriculation whereas in males 40% of the subjects had studied up to higher secondary. In results of our study it was found that there was a significant difference between the educational status between the two study groups with p-value of 0.049 (75 Male and 75 Female). This is in context to the overall literacy rate as per the National Census conducted in 2011 where females had lower literacy rate (65.5%) than males who had higher literacy rate (82.1%)[31].

This disparity is even more significant in country like India due to its strong societal stereotyping the male and female roles, in which Sons are considered to be more useful and hence are more educated.

Similar findings were seen in the study conducted by Peyrot et al., which found that there is significant association proportional relation between lower educational status and the risk of developing depressive disorder[32].

A study done by Gan et al., showed that lower levels of educational status increased the risk and severity of depressive episodes.[33]

Similar findings were seen in the study done by Shukla et al., observed that subjects which had lower educational status, showed comparatively higher rates of depressive episodes.[34]

Family Type

In our study, out of the total subjects, 33.33% females belonged to joint family, 16.67% females belonged to nuclear family and 34% males belonged to joint family and 16% belonged to nuclear family[35]. In the latest Indian study conducted, it was observed that joint families in urban India grew by 29%, whereas in rural by 6%. These findings could be attributed to the fact that, most of the people in India live in joint family system, which is a facet of hindu culture. Despite industrialization, joint families continue to have a predominant influence on family structure as a system of mutual aid among its members and has been recognized as the cultural ideal of domestic organization in India.

Rural and Urban Population

In our study it was seen that out of total subjects, 30% females belonged to urban population, 20% females belonged to rural population, 28.67% males belonged to urban population, 21.33% belonged to rural population. This may be because the study was conducted in a tertiary care hospital in a big city so most of the patients coming to the OPD belonged to urban areas.

The findings in our study are in concordance to the study done by Probst et al., which studied the prevalence of depression among rural and urban population had 78.7% males and 85% females belonging to urban population and 21.3% males and15% females belonged to rural population[36]. Inrecent study by Satyanarayana et al., which also showed similar findings[37].

HAM-D Score

All the subjects in the present study were screened using Hamilton Depression Rating scale (HAM-D) and the subjects who scored more than 20 were selected for the study. The score in the subjects ranged between

20-35. In our study, it was seen that the females scored higher on HAM-D (Mean score 26.14) in comparison to the males (Mean Score 24.32). The findings showed significant difference between both genders in the HAM-D score with p-value of 0.011.

Similar findings were seen in an Indian study done by Albert et al.,[38,39] in which females scored higher on depressive symptoms than males. Study done by Roy at el., also showed that females scored higher on depression severity measures[40].

In study done by Robinson et al., to assess the gender difference in the severity of depressive symptoms, females scored higher than males on depression severity measures[41].

In study done by Deshpande et al., to find out the severity and disability among genders in depressive disorders it was seen that Mean HDRS score (Hamilton Depression Rating Scale) was much higher in females than males[42].

However, our findings were inconsistent with the study done by Stage et al., no significant gender difference was seen the severity of depression[43]. Another study done by Fletcher et al., showed females scored only marginally higher than males on depression severity measures[44].

COPING STYLES

In our study subjects were evaluated on scale of BRIEF COPE QUESTIONNAIRE to determine the various coping strategies used by them. Coping strategies are divided into problem focused and emotion focused. Problem focused strategies which include accepting, problem solving, praying, controlling and seeking social and instrumental support. Emotional focused strategies include distraction, emotional support, acceptance, religion.

In our study it was seen that males used coping strategies such as acceptance, active coping, positive reframing which belong to problem focused emotional style. Whereas females used coping strategies such as

denial, emotional support, venting, religion and self blame which belong to emotional focused strategy were more prevalent.

As already discussed, it was seen that females tend to use emotion focused as coping strategy more commonly than males. These findings are in concordance with study done by Beukes et al., which depicted that females reported using of emotion-focused coping to a greater extent than male, whereas male reported using relatively more problem-focused coping than female[45].

According to the survey conducted by Sinha et al., to find out the coping response to stressors among genders, it was seen that females used emotion focused coping strategy more commonly than males[46].

Similar findings were seen in the study done by Janet et al., it was the gender difference in coping styles with depression and observed that females used more of emotion focused strategies and males used more of problem focused strategies[47].

In study done by Lawrence et al., showed that males have more tendency to avoid emotion focused strategies than females who use it predominantly[48].

By way of explanation for the findings described here, authors like Mataud and Ptacek et al., suggest these sorts of differences are consistent with the socialization hypothesis, which predicts that males are instructed to use more active, instrumental coping behaviors, while females are taught to utilize more passive, emotion-focused behaviors. From another explanatory point of view, Billings, Moos and Lazarus hold that gender differences in adaptation can be explained by variations in the type of situations males and females tend to encounter. That is, females experience more stressful events related to health and family, while males perceive more stressful events related to their work and finances[49].

In our study, with regards to using of distraction as a coping style significant difference was seen between males and females (p-value 0.043). It was seen that males (Mean score 2.72) reported use of

distraction as coping strategy more than females (Mean score 2.32) which is in concordance with the study done by Broderick et al.,[50]

Study done by Thompson et al., showed that males used distraction as a coping strategy more commonly than females[51].

In study done by Das et al., to find out the gender disparity in coping styles to stressor it was seen that males predominantly used distraction as coping strategy[52]. Similar findings were seen in study done by Patel et al.,[53].

With regards to Emotional Support, our study showed significant difference between both genders (p-value 0.001). Females scored significantly higher (Mean 3.52) than males (Mean 1.68) on the emotional support. This is in concordance with findings conducted by Ptacke et al., which showed that females use emotional support as a coping strategy more commonly than Males. In context to Indian scenario females reported higher use of emotional support from both nonfamily adults and peers than males. Thus, the simple correlations between family support and depression are significantly stronger for females than for males[49].

A study done by Kelly et al., showed that females endorsed more of emotional support as a coping strategy than males[10].

However, in study done by Lian et al., females reported lower levels of emotional support than their males counterparts.[54]

Also it was seen in the present study, that Venting had a significant difference (p-value 0.001) between both genders. Females (Mean 3.58) showed higher venting than the males (Mean 1.66). It was seen that females tend to be more expressive when communication is based on emotional experiences than Males.

Similar results were seen by Losub et al., which found that females are more likely than males to practice relationship-oriented speech and Males on the other hand, use significantly more task-oriented, assertive speech and reported reluctance in emotional venting[55].

In study done by Goleman et al., it was observed that venting is used predominantly by females as their coping style during depressive episode in comparison to males[56].

In the study done by Baqutayan et al., females endorsed venting more as a coping style than males who comparatively endorsed lesser use of the same coping style[57].

With regards to another emotional coping strategy i.e., Humor there was significant gender difference (p-value 0.001). It was seen that in males (Mean score 2.5) it was more prevalent than in females (Mean score 1.4). One such explanation to the finding could be males usually have higher social status in comparison to females in the Indian society and society allows more humorous strategies for males than females. It could be understood as firstly people who enjoy jokes may allow themselves to express publicly which could include ease in playing with disgust, an emotion that usually elicits avoidant behaviors. Secondly a variance of this interpretation could be that high propensity to address oneself to others and to ask for advice and help may be a sign of low self esteem. Thirdly, positive attitudes toward jokes may be understood as a (successful or unsuccessful) way of trying to get attention and communicate with others. Extrapolating from the above interpretation, enjoyment of jokes especially the ones causing emotional discomfort may be a sign of at least some aspects of emotional instability or difficulty with emotional regulation which is seen in males due to lesser emotional venting as discussed above[58].

In study done by Abel et al., showed that males tend to score significantly higher in the use of Humor as a coping strategy than females[59]. In study done by Hiranandani et al., males reported use of coping humor styles more commonly than the females counterparts[60].

Study done by Salavera et al., on the use of humor as coping styles between both genders, showed that males scored higher on humor as coping styles than females[61]. Although no gender differences were found

between significant moderating effect of humor and stress, risk of depression and its outcome in study done by Abel et al.,[62].

With regards to positive reframing as coping style, there was a significant difference seen among both genders (p-value 0.001). Oppegaard et al., argued that seeking positive reframing may be a functional coping strategy for both gendersand found that females scored higher for positive reframing than males[63].

Study done by Taylor et al., observed a significant interaction effect seen in this category. Though explained variance was small, females scored higher than males[64].

In study done Mason et al., showed that females were more likely to positive reframing as coping strategy than males[65].

In study done by Lee et al., showed that female participants prioritized positive reframing as a coping strategy more commonly than male participants[66].

In another study done by Revenson et al., studied the use of positive reframing as coping styles between both the genders and showed that males used lesser of it as coping style than females[67].

With regards to self blame variable of coping strategy, significant difference was seen between both genders (p-value 0.001). In our study it was seen that self blame was more prevalent in females (Mean score 2.48) than males (Mean score 1.6). The use of self-blame by females is associated with more depression, and psychological distress in response to stressful situations.

In study conducted by Kleinke et al., who also showed depressed females might benefit most from alleviation of self-blame and adaptive relabeling of depressive symptoms, whereas depressed males might benefit most from increased self-awareness[68].

Similar findings in study done by Kelly et al., which found the use self blame as a coping strategy is predominantly seen in females than in males[10].

In study done by Ullman et al., it was seen that self blame was more commonly used as a coping style while facing stressful events by the females than males[69].

In study done by Barnet et al., which was done to find out the use of self blame as a coping strategy between genders and the changing trend with age. It was observable that across the life span, young and middle-aged adult men score lowest, and the scoring increased with age. In contrast, in females it showed certain stability. As for men's scores, the already classic activity theory (Havighurst et al.,) provides one explanation that is consistent with the considerable change observed. From that point of view, to grow old successfully, one must maintain or even increase their levels of activity. This is because losing one's occupational role and encountering difficulty finding other roles, which above all influences elderly men, implies a significant loss, not only functionally but socially, personally, and economically, that can generate dissatisfaction[70].

In regard to religious faith as coping style, in the present study it was seen that there were substantial gender differences in both religiousness and religious coping (p-value 0.001). Females (Mean score 3.26) used religious faith as a coping strategy more commonly than males (Mean score 2.28). For females, the experiences of a crisis had a deeper religious impact than it did for males; a crisis leads women to think more about religious questions, to see themselves to a higher degree as believers and to have a higher belief in life after death. Only a few studies have explored religiousness and their related coping strategies in a secular society.

One such survey done by Hvidtjorn et al., assessed the use of religious coping in hospitalized Danish patients. Patients reported intensified beliefs and religious practices and there was a statistically significantly increase in women compared to men[71].

Similar findings were seen in the study done by Kataria et al., which was done to find out the role of religious coping among both genders and role

of religious coping as a predictor of outcome of depressive disorders[72]. In study done by Galiana et al., showed the religious coping style trend was increasing with age, which was linearly for women and in males who scored higher on this trend, they belonged to only older age group[73].

Emotional Intelligence

In the present study the subjects were evaluated on Mangal Emotional Intelligence Inventory for emotional intelligence. Females scored higher with mean score of 67.76 and males scored with mean score of 56.72. The findings of the current study indicated that females tend to have higher emotional intelligence than males.

Sanchez et al., stated that the probable reason for females to score higher is due to the fact that emotional intelligence deals with managing and expressing one's emotions as well as social skills. Since females tend to be more sensitive, expressive, and perceptive and have greater empathy than male, so their emotional intelligence ought to be higher than that of males. This may be because of the society, which socializes the two genders differently. Since females tend to be more emotional and intimate in relationships as compared to males, so their emotional intelligence ought to be higher. Moreover, higher emotional intelligence among females can also be explained in terms of some of their personality characteristics[74].

Similar findings were reported in studies by Verma et al., which showed that females scored higher with regard to empathy, social responsibilities and interpersonal relationships than males. More sensitivity was found towards their relationships with parents, friends and siblings. All these traits help them to acquire more emotional intelligence as compared to males[75].

In our present study it was seen that significant difference was seen in mean the domains of emotional intelligence as categorized in inventory (p-value0.001). In the present study the mean score in females for intrapersonal awareness was 15.24 which falls in description of average

intrapersonal awareness and was comparatively higher when seen in males which had a mean score of 13.14 that falls in poor intrapersonal awareness (p-value 0.001). Similarly, in the other domains of emotional intelligence females scored higher than males. In the present study mean score in inter personal awareness was higher in females (Mean 15.72) than males (Mean 13.42); intrapersonal management was higher in females (Mean 18.44) than in males (Mean 15.16) and in interpersonal management it was higher in females (Mean 18.34) than in males (Mean 15.1).

In study done by Fischer et al., females outnumbered males at self awareness, self regard, empathy and being sociable. These findings could be attributed to the fact that females are better at recognizing subtle emotions and are more sensitive to subtle cues of emotional expression. And the fact that females more often have social emotional roles both with regard to child care and personal relations, could therefore imply that they are more focused and motivated at detecting subtle cues of emotions[76].

A meta-analysis of 215 study sample by Thomson et al., found overall female advantage in emotional recognition. It indicated greater female superiority to discriminate between vocal and facial expression regardless of valence, and also being able to accurately process emotional speech. Studies have also found males to be slower in making social judgments than females. Structural studies with MRI neuroimaging has also shown that women have bigger regional grey matter volumes in a number of regions related to social information processing including the inferior frontal cortex and bigger cortical folding in the Inferior frontal cortex and parietal cortex[77].

With regards to the gender difference in these family types, females living in joint family had higher mean emotional intelligence (Mean 68.24) than the males (Mean 67.85). And among the nuclear family type females (Mean 52.75) had a lower mean emotional intelligence than whereas males living in nuclear family (Mean 53.47).

Whereas various other domains did not show any significant gender difference in the emotional intelligence. In the present study it was seen that females scored more than males overall. Study carried out by Gayathri et al., found that females have higher EI than males[78] and study done by Ranasinghe et al., also showed similar findings[79]. In study carried out by Joshi & Dutta et al., the EI of females was demonstrated to be higher in comparison with their male counterparts[80].

However our findings were not consistent to the study conducted by Zohrevand et al., which found lower EI in females[81]. Another study conducted by Myint & Aung et al., did not find significant difference between the EI of males and females[82].

This is concordance with the findings seen in the study done by Alavi et al., which observed that females staying in joint family have higher emotional intelligence than males staying in joint family[83]. In study done by Meshkat et al., found that females scored higher than males in emotional intelligence and interpersonal skills than males[84]. In study done by Petrides & Furnham et al., the overall EI scores of females was significantly higher than males[85]. Whereas various other domains did not show any significant gender difference in the emotional intelligence.

In addition to the interdependencies among the variables, the present study has also brought to light certain interesting gender differences in the cognitive and affective domain showing that EI had a greater role in determining overall copying strategies among females and males and therefore can become a strong predictor and a protective factor in determining the long-term prognosis and outcome in patients of Bipolar depressive patients.

Limitations

The limitations of the study are that it is specific to one geographic area. The results can be generalized to other populations in the region, but its generalization beyond similar populations may be difficult. Another

limitation is that, as this was a cross-sectional study, no causal inference can be drawn from the results, and only associations can be established.

SUMMARY AND CONCLUSIONS

The present study focused on Gender differences in Emotional intelligence and Coping Strategies in patients of bipolar depressive disorder which was influenced by the educational status of the participants, Ham-d score. In our study we noted the following points: -

Majority of females (36%) and males (38%) were between 21-30 years of age

- Majority of the females were educated upto matriculation 36% and males were educated upto higher secondary
- 33% females belonged to joint family, 16.67% females belonged to nuclear family, 34% males belonged to joint family, 16% males belonged to nuclear family.
- 30% females belonged to urban population, 20% females belonged to rural population, 28.67% males belonged to urban population, 21.33% belonged to rural population
- Mean and SD on HAM-D for females was 26.14(3.36) in comparison to males which was 24.32(3.62) respectively.
- The patient age, education, family type and rural urban background showed significant relationship and HAM-D in our study.
- SD of females for distraction, active coping, denial, emotional support were 0.76, 0.81, 0.49, 0.61 and for males it was 1.14, 1.07, 0.45, 0.68 and there was significant difference seen between both genders
- SD of females for venting, positive reframing, humor, religion, self-blame, planning were 0.60, 0.65, 0.49, 0.82, 1.03, 0.68 respectively and for males it was 0.74, 0.61, 0.99, 0.78, 0.98, 0.56 respectively and there was significant difference seen between both genders
- However no significant difference was seen in acceptance variable of coping strategy, with SD in females (0.67) and males (0.62).
- Significant gender difference was seen in intra personal awareness with mean of 15.24 in females and 13.14 in males
- Significant gender difference was seen in inter personal awareness

with mean of 15.78 in females and 13.42 in males

- Significant gender difference was seen in intra personal management with mean of 18.44 in females and 15.16 in males
- Significant gender difference was seen in inter personal management with mean of 18.34 in females and 15.1 in males
- Mean emotional intelligence in females was 67.76 and males was 56.72

So, this study highlights that the importance of coping strategies and emotional intelligence between both genders. The study was important as it showed that EI and coping strategies had a greater role among genders and can become a strong predictor and a protective factor in determining the long-term prognosis and outcome in patients of Bipolar depressive patients.

Finally, considering the scarce information available on gender differences between emotional intelligence and coping strategies in bipolar depressive patients and further research is needed to better understand it role in outcome.

LIMITATIONS

A limitation of the present study was that the sample size was limited to 150 participants. Also, the sample was limited to one hospital setting which was in a big city. Another limitation was that due to small sample size, it can't be generalized to the population.

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KEY TO MASTER CHART

EDUCATION
5- UPTIL PRIMARY
10- TILL MATRICULATIO
12- HIGHER SECONDARY
GRAD- GRADUATION

SELF DISTRACTION
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

ACTIVE COPING
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

DENIAL
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

EMOTIONAL SUPPORT
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

VENTING
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

POSITIVE REFRAMING
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

HUMOR
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

RELIGION
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

SELF BLAME
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

ACCEPTANCE
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

PLANNING
1- I HAVEN'T BEEN DOING THIS
2-DOING THIS LITTLE BIT
3-DOING IN MEDIUM AMOUNT
4- DOING A LOT

SR. NO	MRD NO.	Name Initials	AGE	GENDER	EDUCATION	FAMILY	RURAL/ URBAN	HAM-D	SELF DISTRACTION	ACTIVE COPING	DENIAL	EMOTIONAL SUPPORT	VENTING	POSITVE REFRAMING	HUMOR	RELIGION	SELF BLAME	ACCEPTANCE	PLANNING	EMPTIONAL INTELLIGENCE
1	646251	KK	38	Female	10	JOINT	URBAN	21	4	4	1	1	1	4	4	3	1	4	4	81
2	797401	MK	46	Female	5	JOINT	RURAL	21	4	4	1	1	1	4	4	3	1	4	4	81
3	646259	RG	39	Male	12	JOINT	URBAN	23	4	4	1	1	1	4	4	2	1	2	3	63
4	646267	AG	41	Male	Grad	JOINT	URBAN	22	4	4	1	2	2	3	2	1	1	4	4	68
5	834604	AM	23	Male	12	NUCLEAR	URBAN	23	4	4	1	2	2	3	2	1	1	4	4	64
6	646273	JB	49	Female	10	JOINT	URBAN	23	3	3	1	1	1	3	4	3	1	3	3	80
7	646346	NK	23	Female	Grad	JOINT	URBAN	24	3	2	2	1	1	2	3	2	1	3	2	79
8	646291	FR	31	Female	10	JOINT	URBAN	26	3	2	2	1	1	2	3	2	1	3	2	79
9	797408	TS	36	Female	10	JOINT	URBAN	24	3	3	1	2	2	3	2	2	1	2	3	78
10	646328	MS	53	Male	Grad	NUCLEAR	URBAN	25	4	4	1	1	1	4	4	2	1	2	3	70
11	646218	PN	34	Male	5	JOINT	RURAL	27	3	3	2	3	3	1	2	3	2	2	1	62
12	834698	BS	50	Male	10	NUCLEAR	URBAN	25	3	3	1	2	2	3	2	2	1	2	3	78
13	646269	NS	29	Male	Grad	JOINT	URBAN	21	4	3	1	1	1	3	3	3	1	3	3	66
14	797407	IS	24	Male	12	JOINT	URBAN	27	3	3	1	1	1	3	4	3	1	3	3	80
15	834662	KA	52	Male	0	JOINT	RURAL	22	1	3	1	3	4	1	1	1	1	3	1	76
16	646275	RM	50	Female	10	JOINT	URBAN	25	3	3	1	2	2	3	2	2	1	2	3	78
17	834607	GG	26	Female	Grad	JOINT	URBAN	25	3	3	1	2	2	3	2	2	1	2	3	78
18	834696	JK	55	Female	5	JOINT	RURAL	27	3	3	1	1	1	3	4	3	1	3	3	78
19	646399	JK	28	Male	12	JOINT	URBAN	27	3	3	1	1	1	3	4	3	1	3	3	78
20	834607	PJ	25	Female	12	JOINT	RURAL	25	3	3	1	2	2	3	2	2	1	2	3	77
21	646355	CM	29	Male	Grad	NUCLEAR	RURAL	22	3	3	2	3	3	1	2	3	2	2	1	43
22	646334	VM	38	Male	10	JOINT	URBAN	23	3	3	1	4	4	2	1	3	2	3	2	59
23	646397	DB	30	Male	12	JOINT	URBAN	26	3	3	1	1	1	3	4	3	1	3	3	80
24	834611	HK	23	Female	10	JOINT	URBAN	24	1	1	1	2	2	2	2	2	3	3	3	72
25	646280	AK	39	Female	Grad	JOINT	URBAN	29	3	3	1	1	1	3	4	3	1	3	3	72
26	646220	DN	28	Male	12	NUCLEAR	RURAL	21	3	3	2	3	3	1	2	3	2	2	1	47
27	646330	KJ	22	Female	12	JOINT	URBAN	22	4	3	1	1	1	3	3	3	1	3	3	70
28	834605	GS	29	Female	5	JOINT	RURAL	23	2	2	1	2	1	3	2	2	1	3	4	70
29	797409	RC	46	Male	Grad	JOINT	URBAN	21	4	3	1	1	1	3	3	3	1	3	3	67
30	834602	AT	26	Female	12	NUCLEAR	URBAN	25	4	4	1	1	1	4	4	2	1	2	3	70
31	646395	PK	55	Male	12	JOINT	URBAN	25	3	3	1	2	2	3	2	2	1	2	3	78
32	646263	PD	39	Female	10	JOINT	URBAN	22	4	4	1	2	2	3	2	1	1	4	4	68
33	834668	DM	39	Male	12	NUCLEAR	URBAN	21	3	3	2	3	3	1	2	3	2	2	1	52
34	797405	HB	24	Female	12	NUCLEAR	URBAN	22	4	4	1	2	2	3	2	1	1	4	4	67
35	646226	GK	47	Female	5	JOINT	URBAN	22	4	4	1	2	2	3	2	1	1	4	4	67
36	834609	JM	48	Female	5	JOINT	RURAL	21	4	3	1	1	1	3	3	3	1	3	3	66
37	646332	TS	28	Female	12	JOINT	URBAN	21	4	3	1	1	1	3	3	3	1	3	3	66
38	646289	TR	30	Male	12	JOINT	RURAL	23	3	3	1	4	4	2	1	3	2	3	2	59
39	834640	JN	32	Male	Grad	JOINT	URBAN	25	3	3	2	3	3	1	2	3	2	2	1	66
40	646283	PM	22	Female	12	JOINT	URBAN	24	3	3	1	1	1	2	1	1	1	3	3	66
41	797422	QC	62	Female	5	JOINT	URBAN	27	3	1	1	4	4	1	1	4	4	4	1	66
42	834617	BS	52	Female	10	JOINT	URBAN	22	2	2	2	3	4	2	1	3	1	3	2	65
43	838462	VK	47	Female	12	JOINT	URBAN	24	3	2	2	4	4	1	1	3	2	2	2	65
44	834680	MHQ	35	Female	5	JOINT	RURAL	21	1	1	1	2	2	2	2	2	3	3	3	63
45	834666	KC	48	Female	5	JOINT	RURAL	20	1	3	1	3	4	1	1	1	1	3	1	62
46	646277	MD	28	Male	12	JOINT	URBAN	25	3	3	1	2	2	3	2	2	1	2	3	77
47	797403	SS	35	Male	Grad	JOINT	URBAN	32	3	3	2	2	2	4	4	4	1	3	3	76

SR. NO	MRD NO.	Name Initials	AGE	GENDER	EDUCATION	FAMILY	RURAL/ URBAN	HAM-D	SELF DISTRACTION	ACTIVE COPING	DENIAL	EMOTIONAL SUPPORT	VENTING	POSITVE REFRAMING	HUMOR	RELIGION	SELF BLAME	ACCEPTANCE	PLANNING	EMPTIONAL INTELLIGENCE
48	646285	KK	58	Male	Grad	JOINT	URBAN	24	3	3	1	1	1	2	1	1	1	3	3	76
49	646328	CS	42	Male	5	JOINT	RURAL	23	3	3	1	2	2	3	2	2	1	2	3	79
50	646356	MC	51	Female	10	JOINT	URBAN	21	3	3	2	3	3	1	2	3	2	2	1	62
51	797419	KN	32	Female	10	JOINT	URBAN	22	1	3	1	3	4	1	1	1	1	3	1	62
52	646358	BN	42	Female	5	JOINT	RURAL	22	1	3	1	3	4	1	1	1	1	3	1	62
53	834696	TK	31	Male	12	NUCLEAR	URBAN	23	2	2	1	2	1	3	2	2	1	3	4	64
54	834696	SM	46	Male	Grad	JOINT	URBAN	31	3	2	3	2	2	3	1	3	1	2	2	67
55	646222	AN	23	Male	12	NUCLEAR	RURAL	25	2	2	2	4	4	1	1	3	2	2	2	45
56	646352	HC	49	Female	10	JOINT	RURAL	25	2	1	2	4	3	2	1	4	3	3	1	62
57	646225	TC	24	Female	Grad	NUCLEAR	URBAN	29	3	1	1	4	4	1	1	4	4	4	1	62
58	646320	MS	30	Female	10	JOINT	URBAN	29	3	1	1	4	4	1	1	4	4	4	1	62
59	797413	VD	36	Female	10	NUCLEAR	RURAL	23	3	3	1	4	4	2	1	3	2	3	2	59
60	834615	BD	45	Male	10	NUCLEAR	RURAL	29	2	2	1	4	4	2	2	4	3	3	2	49
61	797415	AS	36	Male	5	NUCLEAR	URBAN	28	2	2	1	4	4	2	2	4	3	3	2	50
62	834612	DC	45	Female	12	NUCLEAR	URBAN	23	3	3	1	4	4	2	1	3	2	3	2	59
63	646348	SC	34	Male	Grad	NUCLEAR	URBAN	29	2	2	1	4	4	2	2	4	3	3	2	49
64	834619	HS	23	Female	10	JOINT	RURAL	25	2	1	2	4	3	2	1	4	3	3	1	58
65	834684	JD	29	Male	12	JOINT	RURAL	22	2	2	2	3	4	2	1	3	1	3	2	65
66	834622	PC	25	Male	12	NUCLEAR	RURAL	29	1	2	2	3	3	1	1	3	2	3	2	50
67	834617	RK	39	Female	10	JOINT	RURAL	25	2	2	1	4	4	2	2	4	3	3	2	56
68	646293	DS	54	Male	10	JOINT	RURAL	28	2	2	1	4	4	2	2	4	3	3	2	52
69	646282	FS	42	Male	10	JOINT	RURAL	23	2	2	1	2	1	3	2	2	1	3	4	70
70	834650	KHD	48	Male	Grad	NUCLEAR	RURAL	25	2	2	2	4	4	1	1	3	2	2	2	55
71	834616	BR	23	Male	12	JOINT	URBAN	28	2	2	1	4	4	2	2	4	3	3	2	71
72	797411	AK	25	Female	Grad	JOINT	URBAN	35	1	1	1	2	3	2	1	2	4	4	3	55
73	646332	VS	27	Male	10	JOINT	URBAN	31	3	2	3	2	2	3	1	3	1	2	2	77
74	848688	SK	39	Male	10	JOINT	RURAL	26	2	2	2	3	4	2	1	3	1	3	2	61
75	646362	HM	28	Male	12	JOINT	URBAN	32	1	2	2	3	3	1	1	3	2	3	2	59
76	834682	DD	22	Female	12	NUCLEAR	RURAL	35	1	1	1	2	3	2	1	2	4	4	3	55
77	834686	CR	40	Female	Grad	JOINT	URBAN	28	2	2	1	4	4	2	2	4	3	3	2	63
78	834652	DT	28	Male	10	NUCLEAR	RURAL	32	1	1	1	4	4	1	1	4	4	3	3	47
79	834612	TM	25	Female	12	NUCLEAR	RURAL	21	1	1	1	2	2	2	2	2	3	3	3	52
80	646287	MK	32	Female	5	NUCLEAR	RURAL	27	1	1	1	2	2	2	2	2	3	3	3	52
81	646297	ND	34	Male	Grad	NUCLEAR	RURAL	21	1	1	1	2	2	2	2	2	3	3	3	52
82	646350	KD	28	Female	Grad	JOINT	RURAL	26	2	2	1	4	4	2	2	4	3	3	2	51
83	646354	ZA	45	Female	12	NUCLEAR	RURAL	29	1	2	2	3	3	1	1	3	2	3	2	50
84	646362	KS	30	Male	12	NUCLEAR	URBAN	32	1	1	1	4	4	1	1	4	4	3	3	47
85	646295	GS	39	Female	Grad	NUCLEAR	URBAN	29	2	2	1	4	4	2	2	4	3	3	2	49
86	646224	NC	26	Female	12	NUCLEAR	URBAN	33	3	3	2	3	3	1	2	3	2	2	1	48
87	834684	TD	38	Male	12	JOINT	RURAL	25	2	1	2	4	3	2	1	4	3	3	1	58
88	834654	UR	45	Male	Grad	JOINT	URBAN	27	3	1	1	4	4	1	1	4	4	4	1	62
89	834620	MM	42	Male	10	NUCLEAR	URBAN	32	1	1	1	4	4	1	1	4	4	3	3	47
90	797417	DR	26	Male	Grad	JOINT	URBAN	21	1	1	1	2	2	2	2	2	3	3	3	62
91	646364	ST	46	Female	10	NUCLEAR	RURAL	28	3	1	1	4	4	1	1	4	4	4	1	47
92	646310	IC	52	Male	12	JOINT	RURAL	21	1	1	1	2	2	2	2	2	3	3	3	79
93	646324	NM	48	Female	10	NUCLEAR	RURAL	29	3	1	1	4	4	1	1	4	4	4	1	47
94	646352	UN	26	Male	12	JOINT	URBAN	21	1	1	1	2	2	2	2	2	3	3	3	57

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95	797422	PS	54	Male	0	JOINT	RURAL	29	3	1	1	4	4	1	1	4	4	4	1	64
96	834620	JS	43	Male	10	JOINT	RURAL	21	1	1	1	2	2	2	2	2	3	3	3	63
97	646354	NN	34	Female	12	NUCLEAR	URBAN	25	2	2	2	4	4	1	1	3	2	2	2	45
98	797420	GM	26	Female	Grad	NUCLEAR	URBAN	25	3	3	2	3	3	1	2	3	2	2	1	41
99	646214	CN	53	Male	5	JOINT	URBAN	21	1	1	1	2	2	2	2	2	3	3	3	62
100	646360	BT	37	Female	10	NUCLEAR	RURAL	25	3	3	2	3	3	1	2	3	2	2	1	41
101	997161	PD	22	Female	Grad	NUCLEAR	URBAN	10	3	4	2	4	3		2	4	2	2	4	92
102	997538	CS	53	Male	12	JOINT	RURAL	11	1	4	1	1	2	4	3	2	1	2	4	88
103	997523	RS	40	Female	12	JOINT	URBAN	12	4	2	2	3	3	3	3	3	2	3	4	75
104	997586	YA	25	Female	10	NUCLEAR	URBAN	8	4	2	2	3	3	3	3	3	2	3	4	80
105	38649	AG	53	Male	10	JOINT	URBAN	11	1	4	1	1	2	4	3	2	1	2	4	77
106	997534	JB	29	Female	12	JOINT	RURAL	10	4	2	2	3	3	3	3	3	2	3	4	84
107	997554	MK	41	Female	12	JOINT	URBAN	16	3	4	2	4	3		2	4	2	2	4	79
108	997546	PC	34	Female	12	JOINT	RURAL	12	4	2	2	3	3	3	3	3	2	3	4	92
109	142742	AP	51	Male	10	JOINT	URBAN	11	1	4	1	1	2	4	3	2	1	2	4	81
110	997564	CD	36	Female	10	JOINT	RURAL	6	4	2	2	3	3	3	3	3	2	3	4	88
111	997004	GS	42	Female	12	JOINT	URBAN	10	4	2	2	3	3	3	3	3	2	3	4	76
112	633159	MD	49	Male	Grad	NUCLEAR	URBAN	12	1	4	1	1	2	4	3	2	1	2	4	83
113	818135	AS	37	Male	12	JOINT	RURAL	11	1	4	1	1	2	4	3	2	1	2	4	80
114	997514	G	47	Female	Grad	NUCLEAR	URBAN	2	4	2	2	3	3	3	3	3	2	3	4	80
115	633133	RM	39	Male	12	JOINT	RURAL	12	1	4	1	1	2	4	3	2	1	2	4	85
116	997540	TS	45	male	10	NUCLEAR	URBAN	11	1	4	1	1	2	4	3	2	1	2	4	84
117	142788	SS	46	Female	Grad	NUCLEAR	RURAL	12	4	2	2	3	3	3	3	3	2	3	4	84
118	997582	PV	48	Male	12	JOINT	RURAL	8	1	4	1	1	2	4	3	2	1	2	4	87
119	997598	PS	21	Female	10	JOINT	RURAL	6	4	2	2	3	3	3	3	3	2	3	4	88
120	997212	SG	23	Male	5	JOINT	RURAL	11	1	4	1	1	2	4	3	2	1	2	4	96
121	999470	SD	27	male	10	NUCLEAR	URBAN	13	1	4	1	1	2	4	3	2	1	2	4	78
122	99474	SK	49	Male	10	JOINT	URBAN	14	1	4	1	1	2	4	3	2	1	2	4	89
123	997164	TK	24	Male	Grad	NUCLEAR	URBAN	11	1	4	1	1	2	4	3	2	1	2	4	80
124	997528	TC	44	Female	12	NUCLEAR	URBAN	8	4	2	2	3	3	3	3	3	2	3	4	91
125	997650	AD	25	Male	10	JOINT	RURAL	14	4	2	2	3	3	3	3	3	2	3	4	88
126	633131	TV	42	Female	12	NUCLEAR	URBAN	10	4	2	2	3	3	3	3	3	2	3	4	87
127	997580	SS	23	Female	10	JOINT	RURAL	8	4	2	2	3	3	3	3	3	2	3	4	93
128	997536	TK	41	Male	12	JOINT	RURAL	10	1	4	1	1	2	4	3	2	1	2	4	94
129	997614	GS	27	Female	12	NUCLEAR	URBAN	6	4	2	2	3	3	3	3	3	2	3	4	98
130	999648	DB	39	Female	10	NUCLEAR	RURAL	10	4	2	2	3	3	3	3	3	2	3	4	82
131	997198	SJ	31	Male	Grad	JOINT	URBAN	11	1	4	1	1	2	4	3	2	1	2	4	97
132	997548	PR	37	Female	12	NUCLEAR	URBAN	12	4	2	2	3	3	3	3	3	2	3	4	86
133	345283	RS	38	Female		joint	RURAL	10	4	2	2	3	3	3	3	3	2	3	4	80
134	209434	DD	35	Female	12	JOINT	URBAN	14	4	2	2	3	3	3	3	3	2	3	4	99
135	997542	JJ	49	Male	10	JOINT	RURAL	11	1	4	1	1	2	4	3	2	1	2	4	97
136	142746	AS	45	Female	10	joint	RURAL	11	4	2	2	3	3	3	3	3	2	3	4	88
137	997520	PG	33	Male	12	NUCLEAR	RURAL	11	1	4	1	1	2	4	3	2	1	2	4	88
138	997522	S	32	Female	10	joint	URBAN	7	4	2	2	3	3	3	3	3	2	3	4	76
139	142799	AK	25	Male	5	JOINT	URBAN	11	1	4	1	1	2	4	3	2	1	2	4	86
140	994750	PJ	24	Female	12	JOINT	URBAN	13	4	2	2	3	3	3	3	3	2	3	4	78
141	997544	CS	18	Male	5	NUCLEAR	URBAN	11	1	4	1	1	2	4	3	2	1	2	4	88

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142	998528	IS	28	Female	12	joint	RURAL	9	4	2	2	3	3	3	3	3	2	3	4	96
143	99476	AS	32	Male	10	JOINT	URBAN	13	1	4	1	1	2	4	3	2	1	2	4	80
144	633137	DS	20	Female	12	JOINT	URBAN	11	4	2	2	3	3	3	3	3	2	3	4	90
145	997550	ZM	40	Female	12	JOINT	URBAN	13	4	2	2	3	3	3	3	3	2	3	4	84
146	997532	P	39	Male	10	JOINT	RURAL	8	4	2	2	3	3	3	3	3	2	3	4	82
147	99474	IK	51	Male	10	JOINT	RURAL	13	1	4	1	1	2	4	3	2	1	2	4	80
148	997596	RK	26	Male	10	joint	RURAL	6	4	2	2	3	3	3	3	3	2	3	4	94
149	99478	RV	48	Male	10	JOINT	URBAN	13	1	4	1	1	2	4	3	2	1	2	4	84
150	997558	RS	33	Male	12	NUCLEAR	URBAN	13	1	4	1	1	2	4	3	2	1	2	4	86

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No. BFUHS/2K19p-TH/ 1-423

Date 9/9/19

The Principal,
DMC, Ludhiana.

Subject: **Approval of Plan of Thesis.**

This is to inform you that the Faculty of Medical Sciences in its meeting held on 29.05.2019 has approved the plan of thesis of **Pretty Duggar**, a student of your college for **MD Psychiatry** along with the names of Supervisor/Co-Supervisor as under:-

Topic Plan of Thesis

Gender differences in emotional intelligence and coping strategies in patients of bipolar depressive disorder

Supervisor
Dr. Ranjive Mahajan
Prof. & Head,
Dept. of Psychiatry,
DMCH, Ludhiana.

Co-Supervisor
Dr. Navkiran S. Mahajan
Prof.,
Dept. of Psychiatry,
DMCH, Ludhiana.

The student has to submit the four copies of thesis (along with PDF format) , to the Controller of Examinations, BFUHS, Faridkot, at least six months before the commencement of theory examination, if he/she is otherwise eligible to take the examination. He /She must directed to attach a photocopy of this letter with the forwarding letter while submitting thesis to the University along with the letter of approval of University for change of supervisor/Co-Supervisor, change of topic,(if any).

SPSingh

Dr. S P Singh MS(Oph)
Controller of Examinations

Note :

1. *If any discrepancy found regarding topic of thesis or Supervisor/Co-Supervisor, inform undersigned within one month after issue of this letter.*
2. *The student may submit the thesis as per the schedule already conveyed i.e for May/June examination 30th Nov of the preceding the year of examination and for Nov/Dec examinations 31st May of the year of examination.*

GENDER DIFFERENCES IN EMOTIONAL INTELLIGENCE AND COPING STRATEGIES IN PATIENTS OF BIPOLAR DEPRESSIVE DISORDER

THESIS PROPOSAL

FOR APPROVAL OF SUBJECT OF THESIS TO BE SUBMITTED

IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

Doctor of Medicine
in

PSYCHIATRY

OF THE

BABA FARID UNIVERSITY OF HEALTH SCIENCES
FARIDKOT

NOVEMBER, 2018

DR. PRETTY DUGGAR

DEPARTMENT OF PSYCHIATRY
DAYANAND MEDICAL COLLEGE AND HOSPITAL
LUDHIANA

ABSTRACT OF PLAN OF THESIS

Title	GENDER DIFFERENCES IN EMOTIONAL INTELLIGENCE AND COPING STRATEGIES IN PATIENTS OF BIPOLAR DEPRESSIVE DISORDER
For the degree of	MD PSYCHIATRY
Name of the candidate	DR. PRETTY DUGGAR
Supervisor	Dr. Ranjive Mahajan, Professor and Head, Department of Psychiatry, DMCH, Ludhiana
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Institution	Dayanand Medical College & Hospital, Ludhiana
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Introduction: Bipolar Affective disorders make up an important category of psychiatric illness.. Emotional Intelligence is the ability of an individual to understand one's own and other's emotions and use this knowledge in coping with situations. Coping abilities of individuals determine the vulnerability to stressful life events, which is an important factor influencing the risk for relapse. Studies have suggested that many of such patients have maladaptive coping strategies which influence their illness course. Yet research on which coping strategies most influencing disability, in such patients and their comparison between male and female patients is very scarce.

Aim & Objectives of Study: To study emotional intelligence and gender difference in coping strategies in persons with bipolar depressive disorders.

Materials &Methods: It will be a cross-sectional study conducted on stable patients coming for follow-up in Psychiatry OPD of DMC&H, Ludhiana.. A total of 150 subjects will be included. The sample will be divided into 3 groups: Females with Bipolar depression (n=50), Males with Bipolar Depression (n=50), Healthy controls (n=50), age matched. The subjects will be evaluated on their symptoms via HAM-D scale and their coping strategies by using the Brief Cope Questionnaire and Mangal Emotional Intelligence Inventory.

Clinical Significance: Bipolar affective disorder is one of the leading causes of psychiatric morbidity and has a relapsing remitting course. Which is dependent on their emotional intelligence and coping. Emotional Intelligence is his ability to understand emotions and use that knowledge in decision making and actions. Coping is defined as "an individuals effort to master demands (conditions of harm, threat, challenge) that are appraised as exceeding or taxing his or her resources. Although the relation of emotional intelligence, coping and affective disorder has attracted attention, but the research in this area is scarce and even more scarce is the comparison between the genders. Especially in the case of Bipolar Disorders with changing treatment approaches coping may be an important target for treatment in long term management of such patients.

Keywords: Bipolar, Depressive, Coping Strategies, Emotional Intelligence, Gender Difference.

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Date of enrollment	9-05-2018
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CERTIFICATE OF FACILITIES AVAILABLE

This is to certify that the facilities for work on the subject of thesis titled **"GENDER DIFFERENCES IN EMOTIONAL INTELLIGENCE AND COPING STRATEGIES IN PATIENTS OF BIPOLAR DEPRESSIVE DISORDERS"** exist in the Department of Psychiatry, DMC&H, Ludhiana and will be provided to the candidate. We will see that the data being included in the thesis is genuine and is collected by the candidate himself under our supervision and guidance.

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5	TITLE OF THE TOPIC	A STUDY GENDER DIFFERENCES IN OF EMOTIONAL INTELLIGENCE AND COPING STRATEGIES IN PATIENTS OF BIPOLAR DEPRESSIVE DISORDER

6. BRIEF RESUME OF THE INTENDED WORK

6.1 NEED FOR THE STUDY

Mood is defined as a pervasive and sustained emotion or feeling tone that influences a person's behavior and colors his or her perception of being in the world. Bipolar affective disorders make up and important category of psychiatric illness consisting of depressive disorder and bipolar disorder. The course tends to be chronic and patients tend to relapse. About 5 to 10 percent patients of Bipolar Depression tend to relapse with a year. There are multiple factors for relapse in such patients which include, non-compliance to medication, intolerable side-effect, lack of sleep, impaired social relations, and stressful life events, among others.

Emotional Intelligence is the ability of an individual to understand one's own and other's emotions and feelings, distinguish between them and use this knowledge in coping with situations

Emotional Intelligence refers to recognize and regulate emotion in ourselves and in others. This definition suggests four major domains: a) Self- Awareness b) Self Management c)Social Awareness and d) Relationship Management.[1]

Emotional Intelligence is also defined in 4 factors, self awareness, self management, social awareness and social skills. Self awareness is defined as to know what we feel, to be able to evaluate our skills and have self confidence, Self management is defined as to manage the feelings in way that would maintain positive mood, Social awareness is defined as empathise towards others, to accept their point of view and Social Skills is defined as ability to regulate feelings in relationships and interact correctly. [2,3]

Coping is an important aspect in predicting the relapse risk in such patients. Coping is defined as "An Individual's effort to master demands (conditions of harm, threat, challenge) that are appraised as exceeding or taxing his or her resources.[4] Coping strategies are behaviors that are employed to adjust to changes that occur in one's life. There are many coping styles that people use, and some may prove more effective than others, depending on the nature of stressful situation and the person who is employing them. Ineffective coping mechanisms, also referred to as maladptive coping may also be applied to stressful events or internal conflict often unconsciously.

Despite the widely acknowledged importance of psychosocial interventions that involve a complex cognitive, behavioral, and biological process to help patients cope better with their illness, few studies have systematically evaluated coping in Depressive Disorders, especially in Bipolar Depressive Disorders and the Gender Difference in such patients

Several studies have documented a strong association between Depressive Disorders and numerous neuroanatomical and neuropsychological abnormalities, particularly multiple episodes and longer durations of the disorder. The most marked effects of Depressive disorders encompass brain areas involved in executive function, which may affect the mechanisms underlying an adequate selection of coping strategies.[5]

So the ability of individuals to reduce their own stress burden is impaired, increasing vulnerability to stressful life events and negatively affecting the course of depressive disorders.

Therefore it becomes important to study the various emotional intelligence and coping strategies employed by such persons, giving us a chance to modi-

fy them and make them more adaptive, thereby reducing their vulnerability to stressful life events and thus decreasing the risk for relapse.

Also, the method of coping between men and women may be different. It may provide us with interesting revelations by comparing the two, which could be useful in non-pharmacological management of men and women.

6.2 REVIEW OF LITERATURE

EMOTIONAL INTELLIGENCE

Emotional intelligence affects: a) one's performance at work b)physical health c) mental health d)relationships.[5] Uncontrolled emotions can affect mental health by making person them more vulnerable to relapse.

The concept on Emotional intelligence is to capture the individual differences in extent to which people experience, understand regulate and utilize their emotions.

Accordingly Emotional intelligence has been measured using IQ like performance tests, whereas EI has been assessed using personality like questionnaires.[7]

In Emotional Intelligence models, emotion related self perceptions have been repeatedly shown to form four interrelated factors:

well being, self control(regulation of emotions and impulses), emotionality (perception and expression of emotions) and sociability (pertaining to interpersonal utilization and management of emotions).

A recent review and meta analysis of research discussed how to construct emotional intelligence is particularly useful in capturing individual differences in emotion regulation.

High Emotional Intelligence regulate their emotions in flexible manner (i.e they can recognize when emotions are informative and when they have to be regulated) and in a way that is consistent with their goals as well as adaptive (i.e maximizing long term survival and welfare).[8]

This review also showed that emotional intelligence is positively linked to functional coping strategies (problem solving, social support seeking and re-appraising) and negatively linked to dysfunctional strategies (inhibition of emotional expression) welfare.[9]

Coping strategies or mechanisms are remedial actions undertaken by people whose survival and livelihood are compromised or threatened. Coping strategies encompass combinations of thoughts, beliefs and behaviors that result from experience of stress. The most common type of coping strategies includes problem- focused coping and emotion focused coping.[10]

In Indian study it was found, it was found that the control group employed coping mechanisms of self control, seeking social support, accepting responsibilities, planful problem solving. The negative strategies were escaping, avoidance and distancing were used to greater extent.[11]

Problem focused coping is aimed at reducing the demand of stressful situation or expanding the resources to deal with it. It involves direct confrontation with stressor either through direct action or through realization of specific problem solving activities. The focus is how to deal with agents that induce stress. Emotion focused coping aims at controlling the emotional response to stressful situation. People regulate emotional response through behavior approaches. In emotion focused coping the individual tries to change his feelings and thought about it.

Studies have done before to know relationship between emotional intelligence and depression. One study done in 2009 support the role of emotional intelligence suggesting that distancing and escaping may be a way of decreasing

negative emotions that are exacerbated by maladaptive emotional coping strategies such as self blame and helplessness.[12]

Emotional Intelligence was correlated positively with adaptive coping strategies and negatively with maldaptive coping strategies and depression.[13]

Similar study done in Australia, it was found that higher emotional intelligence would be related to decreased levels to emotional distress and to more adaptive coping but to less maladaptive coping when faced with stressful situations.[14]

The study done in Odisha, India found out that females are more inclined to use more emotion-focused coping strategies (distancing, escape avoidance) compared to males. Males used more problem focused strategies (seeking social support, confronting, planful problem solving). [15]

According to review study, it was found that high Emotional Intelligence are associated with coping strategies based on problem solving while low levels are associated with coping strategies based on avoidance. Therefore Emotional Intelligence plays an important role in emotional self control and individual's adaptive capacity to cope with stressful situations.

A study conducted in Cleveland USA by Blixen et al to study coping behaviors in patients of bipolar depressive disorder demonstrated that there were two major domains of coping strategies used to self-manage BD. [16]

1) problem focused

2) emotion focused

PROBLEM FOCUSED

a) Altering Lifestyle Behaviors:

Eating healthier was a coping strategy used by some respondents to improve their nutritional intake and overall health and others exercised to improve mobility and flexibility

b) Keeping to a schedule

Taking mood-stabilizing medications at the same times every day was a coping strategy used by some respondents

c) Seeking knowledge on Depressive Disorder

Increasing knowledge about Bipolar Depressive Disorder, either by reading the instructions that came with their medications, or using the internet, was reported as being helpful in coping with managing

d) Socializing

Socializing with family and friends was a conscious effort by some to cope with the isolation that often comes with Bipolar Depressive Disorder

e) Self-monitoring

Monitoring their thoughts and actions was a coping strategy used by some respondents in facing the, sometimes, onerous task of managing.

Talking to oneself about how to slow down and think things through was one method used to self-monitor behaviors and keeping a journal to keep track record of their moods and symptoms

2) **EMOTION FOCUSED**

(distracting activities, denial, isolation, modifying/avoiding, helping others, and seeking social)

a) Distracting

Respondents cited many coping strategies that helped in distracting them from the stress associated with self-managing their chronic mental illness.

Some respondents cited spiritual domains, such as praying, meditation, and thinking positively as helping them cope.

b) Keeping busy

Playing music, reading, or watching TV were cited as coping strategies that helped respondent distract them from thinking about their illness

c) Distancing

Some respondents, however, used denial as a coping strategy to distance themselves from the stress associated with their illness and some preferred Isolation

In summary, the emotion-based coping strategies used by respondents to distract themselves from the stresses associated with managing BD, included spiritual or religious domains, as well as solitary activities that kept them feeling "focused and normal". [16]

Although denial, isolation, and avoidance were used by some as coping strategies to distance themselves from stressful situations, others cited helping others and seeking support from friends, families, and support groups, as helpful in coping with their mental illness.

In the study, women adopted more maladaptive coping strategies such as self-blame. Self-blame items involved criticizing and blaming oneself for things that happened. This could lead to guilty feeling and finally might end up in relapse.

Similar study was carried out by Kelly and colleagues to explore the coping strategies in depressed patients between both genders. Greater emotional reaction to depression with maladaptive coping was more for women and men and women showed additional relationships between greater perceived control over depression and more adaptive coping techniques as well as between perception of consequences of depression and problem solving. [15]

A study carried out by Megan et al to examine sex differences in the use of coping strategies and their relationship to depression the results demonstrated that women who used less positive reframing had higher levels of depressive symptoms compared to men irrespective of their use of more or less positive reframing. [15]

It has been hypothesized that differences in the way women cope with stress could be related to their higher levels of psychological distress, symptoms of depression with men and may be related to sex differences in the prevalence of depression. Indeed, several studies have found that women tend to use coping strategies that are aimed at changing their emotional responses to a situation, whereas men use more problem-focused or instrumental methods of handling stressful experiences. [17]

Another study was conducted by Marcus et al in 2018 to investigate coping strategies in men and women in depressive disorder patients. The analyses revealed that compared to men, women display higher interpersonal sensitivity and use internalized shaming coping strategies.[18]

A study was carried out by Howerton et al in Miami, Florida in 2009 to examine sex differences in coping styles for depressed mood.

They examined the extent to which there were sex differences in 3 coping style types: problem focused, emotion focused, and avoidance focused (Endler& Parker, 1990).[19]

Further examined were the extent to which sex differences in coping styles could be explained by sex differences in chronic strain; the extent to which sex differences in depressed mood could be explained by sex differences in coping style; and whether the effects of different coping style types on depressed mood varied by sex.

Results suggested somewhat complex relationships among sex, coping, chronic strain, and depression. No sex differences in the use of problem-focused coping were observed however, women more often used avoidance-focused techniques.

Although female respondents more often used emotion-oriented strategies compared to male respondents, such use did not prove to be fundamentally harmful for women. In fact, the effects of using emotion-focused strategies, such as the expression of feelings, reduced depressed mood for women, but not for men.

A study was conducted by Takahashi et al in 2009 in Japanese population to assess coping strategies in depression. It was found that depression was associated positively with avoidant strategies but negatively with problem-solving strategies indicates that individual stress-coping strategies have their own significance with respect to depression, and may be utilized in establishing an evidence-based cognitive behavioral approach to depressive patients.[7]

Another study was carried out in spain to assess gender difference in coping strategies to stress and depression. It was found that women scored significantly higher than men in emotional and avoidance coping styles, while scored lower in rational and detachment coping styles. Although the magnitude of differences is moderate to small, several investigators have found that men made more frequent use of instrumental coping and women were more likely to use emotion-focused coping.[20]

Similar study was conducted in India by Manjula and colleagues at banaglore, Karnataka in 2018 to assess interepisodic functioning, coping strategies in patients of bipolar. It was found that better functioning group had better scores on active coping, positive reframing, planning, and acceptance coping dimensions. Adaptive coping was found to be an effective coping style in improving mood and self-esteem; thus, adaptive coping strategies were found to improve functioning.[21]

6.3 AIMS AND OBJECTIVES OF THE STUDY

- To compare emotional intelligence among both men and women of bipolar depressive disorder.
- To compare the various coping strategies among both men and women of bipolar depressive disorder.

7. MATERIALS AND METHODS

7.1 Source of Data

It will be conducted on patients coming for follow-up in Psychiatry OPD of Dayanand Medical College & Hospital, Ludhiana.

7.2 METHOD OF COLLECTION OF DATA

- **INCLUSION CRITERIA**
    1. Patients meeting criteria of DSM V bipolar depressive disorder
    2. Age 18-55 years
    3. HAM-D score <20
    4. Willing to give informed consent
- **EXCLUSION CRITERIA**
    1. Psychitaric co-morbidity
    2. Age <18 years, >55years
    3. Substance use (except tobacco)
    4. Intellectual disability

Patients meeting the required inclusion and exclusion criteria for the study, and willing to give informed consent, will be recruited.

This cross-sectional study will be conducted on a total of 90 stable subjects coming on follow up in Psychiatry OPD of Dayanand Medical College & Hospital, Ludhiana

The sample will be divided into 3 groups: Males with bipolar depression (n=30), Females with Bipolar Depression (n=30), Healthy controls (n=30), age matched.

Socio demographic proforma will be filled containing basic information about subjects.

The subjects will be evaluated on their symptoms by using HAM-D scale and coping strategies by using Brief Cope Questionnaire

TOOLS:

1. Socio demographic proforma
2. HAM-D (Hamilton Depression Rating Scale)
3. Brief Cope Questionnaire
4. Mangal Emotional Intelligence Inventory

1. HAMILTON DEPRESSION RATING SCALE :

It is a multiple item questionnaire used to provide an indication of depression, and as a guide to evaluate recovery. The questionnaire is designed for adults and is used to rate the severity of their depression by probing mood, feelings of guilt, suicide ideation, insomnia, agitation or retardation, anxiety, weight loss, and somatic symptoms.

The original 1960 version contained 17 items (HDRS-17), but four other questions not added to the total score were used to provide additional clinical information. Each item on the questionnaire is scored on a 3 or 5 point scale, depending on the item, and the total score is compared to the corresponding descriptor.

Rating: Clinician rated

Administration Time- 20-30minutes

Main purpose: To assess severity of, and change in, depressive symptoms

Scoring: For the HDRS17, a score of 0–7 is generally accepted to be within the normal range (or in clinical remission), while a score of 20 or higher (indicating at least moderate severity) is usually required for entry into a clinical trial

2. **BRIEF COPE**- The brief cope is an abbreviated version of COPE inventory given by carver in 1997.

The instrument efficiently measures 14 coping mechanism with 28 items.

Scoring-Responses are scored on a 4-point scale that indicates how much the respondent has used the coping strategy depicted by the item:-

- 1-I havn't been doing this at all.
- 2-I've been doing this a little bit.
- 3-I've been doing this a medium amount.
- 4-I've been doing this a lot.
- The COPE assesses some strategies that, in past research on coping, have been found to be adaptive (active coping, use of emotional support, use of instrumental support, positive reframing, planning, humor, acceptance, and religion), and some strategies that have been found to be maladaptive (self-distraction, denial, substance use, behavioral disengagement, venting, and self-blame).

3. Emotional intelligence Inventory by Mangal and Mangal (Annexure-2) This Inventory consists of 100 items for measurement of emotional intelligence in respect of 4areas, namely:

    1. Intra-personal Awareness (knowing about one's own emotions)
    2. Inter-personal Awareness (knowing about others emotions)
    3. Intra-personal Management(managing one's own emotions)
    4. Inter-personal Management(managing others emotions)

Mode of response to each item of the inventory is in the form of a fprced choice i.e either 'YES' or 'NO', indicating complete agreement or disagreement with the proposed statement respectively. There are items in which re-

sponse 'Yes' indicated presence of emotional intelligence and 'No' for the lack of emotional intelligence. Similarly there are items in which response 'No' provides clue for the presence of emotional intelligence and Yes for its absence For scoring One mark will be provided for the response indicating presence of emotional intelligence and zero for the absence of emotional intelligence.[22]

OUTCOME

In this study, it is observed that the females have poor emotional intelligence less coping strategies hampering the quality of life. Present study will draw attention to the fact that emotional intelligence and the coping strategies in both men and women play major role in predicting the course, prognosis of illness thereby predicting the relapse and need for the same to be addressed.

Statistical Analysis

Data will be described in terms of range; mean ±standard deviation (± SD), median, frequencies (number of cases) and relative frequencies (percentages) as appropriate. Comparison of quantitative variables between the study groups was done using ANOVA. For comparing categorical data, Chi square ($\chi 2$) test will be performed and exact test will be used when the expected frequency is less than 5. A probability value (p value)less than 0.05 will be considered statistically significant. All statistical calculations will be done using SPSS (Statistical Package for the Social Science) SPSS 21 version statistical program for Microsoft Windows.

7.3 DOES THE STUDY REQUIRE ANY INVESTIGATIONS OR INTERVENTIONS TO BE CONDUCTED ON PATIENTS OR OTHER HUMANS OR ANIMALS? IF SO, PLEASE DESCRIBE BRIEFLY.

No

7.4 HAS ETHICAL CLEARANCE BEEN OBTAINED FROM YOUR INSTITUTION IN CASE OF 7.3?

Attached herewith

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PROFORMA

SOCIO-DEMOGRAPHIC PROFORMA:

S.NO:-

NAME:-

AGE: **SEX:-**

CR.NO/Adm no/MRD.NO:-

Education-

a) Illiterate b) Upto Matriculation

c) Higher secondary d) Graduate/Post-Graduate

Occupation-

a) Housewife b) Semi-skilled/skilled worker

c) Unemployed d) Other.

Marital Status-

Single/ Married/ Widowed/Divorced/ Seperated

Address-

Contact no.-

Signature of Candidate **Signature of Supervisor**

THE HAMILTON RATING SCALE FOR DEPRESSION

(to be administered by a health care professional)

Patient's Name

Date of Assessment

To rate the severity of depression in patients who are already diagnosed as depressed, administer this questionnaire. The higher the score, the more severe the depression.

For each item, write the correct number on the line next to the item. (Only one response per item)

1. **DEPRESSED MOOD** (Sadness, hopeless, helpless, worthless)
   - **0**= Absent
   - **1**= These feeling states indicated only on questioning
   - **2**= These feeling states spontaneously reported verbally
   - **3**= Communicates feeling states non-verbally—i.e., through facial expression, posture, voice, and tendency to weep
   - **4**= Patient reports VIRTUALLY ONLY these feeling states in his spontaneous verbal and non-verbal communication

2. **FEELINGS OF GUILT**
   - **0**= Absent
   - **1**= Self reproach, feels he has let people down
   - **2**= Ideas of guilt or rumination over past errors or sinful deeds
   - **3**= Present illness is a punishment. Delusions of guilt
   - **4**= Hears accusatory or denunciatory voices and/or experiences threatening visual hallucinations

3. **SUICIDE**
   - **0**= Absent
   - **1**= Feels life is not worth living
   - **2**= Wishes he were dead or any thoughts of possible death to self
   - **3**= Suicidal ideas or gesture
   - **4**= Attempts at suicide (any serious attempt rates 4)

4. **INSOMNIA EARLY**
   - **0**= No difficulty falling asleep
   - **1**= Complains of occasional difficulty falling asleep—i.e., more than 1/2 hour
   - **2**= Complains of nightly difficulty falling asleep

5. **INSOMNIA MIDDLE**
   - **0**= No difficulty
   - **1**= Patient complains of being restless and disturbed during the night
   - **2**= Waking during the night—any getting out of bed rates 2 (except for purposes of voiding)

Adapted from Hedlung and Vieweg, The Hamilton rating scale for depression, *Journal of Operational Psychiatry*, 1979;10(2):149-165

6. **INSOMNIA LATE**

0= No difficulty
1= Waking in early hours of the morning but goes back to sleep
2= Unable to fall asleep again if he gets out of bed

7. **WORK AND ACTIVITIES**

0= No difficulty
1= Thoughts and feelings of incapacity, fatigue or weakness related to activities; work or hobbies
2= Loss of interest in activity; hobbies or work—either directly reported by patient, or indirect in listlessness, indecision and vacillation (feels he has to push self to work or activities)
3= Decrease in actual time spent in activities or decrease in productivity
4= Stopped working because of present illness

8. **RETARDATION: PSYCHOMOTOR** (Slowness of thought and speech; impaired ability to concentrate; decreased motor activity)

0= Normal speech and thought
1= Slight retardation at interview
2= Obvious retardation at interview
3= Interview difficult
4= Complete stupor

9. **AGITATION**

0= None
1= Fidgetiness
2= Playing with hands, hair, etc.
3= Moving about, can't sit still
4= Hand wringing, nail biting, hair-pulling, biting of lips

10. **ANXIETY (PSYCHOLOGICAL)**

0= No difficulty
1= Subjective tension and irritability
2= Worrying about minor matters
3= Apprehensive attitude apparent in face or speech
4= Fears expressed without questioning

11. **ANXIETY SOMATIC:** Physiological concomitants of anxiety, (i.e., effects of autonomic overactivity, "butterflies," indigestion, stomach cramps, belching, diarrhea, palpitations, hyperventilation, paresthesia, sweating, flushing, tremor, headache, urinary frequency). Avoid asking about possible medication side effects (i.e., dry mouth, constipation)

0= Absent
1= Mild
2= Moderate
3= Severe
4= Incapacitating

12. SOMATIC SYMPTOMS (GASTROINTESTINAL)

0= None
1= Loss of appetite but eating without encouragement from others. Food intake about normal
2= Difficulty eating without urging from others. Marked reduction of appetite and food intake

13. SOMATIC SYMPTOMS GENERAL

0= None
1= Heaviness in limbs, back or head. Backaches, headache, muscle aches. Loss of energy and fatigability
2= Any clear-cut symptom rates 2

14. GENITAL SYMPTOMS (Symptoms such as: loss of libido; impaired sexual performance; menstrual disturbances)

0= Absent
1= Mild
2= Severe

15. HYPOCHONDRIASIS

0= Not present
1= Self-absorption (bodily)
2= Preoccupation with health
3= Frequent complaints, requests for help, etc.
4= Hypochondriacal delusions

16. LOSS OF WEIGHT

A. When rating by history:
0= No weight loss
1= Probably weight loss associated with present illness
2= Definite (according to patient) weight loss
3= Not assessed

17. INSIGHT

0= Acknowledges being depressed and ill
1= Acknowledges illness but attributes cause to bad food, climate, overwork, virus, need for rest, etc.
2= Denies being ill at all

18. DIURNAL VARIATION

A. Note whether symptoms are worse in morning or evening. If NO diurnal variation, mark none
0= No variation
1= Worse in A.M.
2= Worse in P.M.

B. When present, mark the severity of the variation. Mark "None" if NO variation
0= None
1= Mild
2= Severe

19. **DEPERSONALIZATION AND DEREALIZATION** (Such as: Feelings of unreality; Nihilistic ideas)

0= Absent
1= Mild
2= Moderate
3= Severe
4= Incapacitating

20. **PARANOID SYMPTOMS**

0= None
1= Suspicious
2= Ideas of reference
3= Delusions of reference and persecution

21. **OBSESSIONAL AND COMPULSIVE SYMPTOMS**

0= Absent
1= Mild
2= Severe

Total Score _____

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Brief COPE

The items below are an abbreviated version of the COPE Inventory.
In creating the reduced item set, we also "tuned" some of the
scales somewhat (largely because some of the original scales had dual focuses) and omitted scales that had not appeared to be important among breast cancer patients. In this way the positive reinterpretation and growth scale became positive reframing (no growth); focus on and venting of emotions became venting (focusing was too tied to the experiencing of the emotion, and we decided it was venting we were really interested in); mental disengagement became self-distraction (with a slight expansion of mentioned means of selfdistraction).
You are welcome to use all scales of the Brief COPE, or to choose selected scales for use.

Following is the BRIEF COPE as we are now administering it,
Scales are computed as follows (with no reversals of coding):
Self-distraction, items 1 and 19
Active coping, items 2 and 7
Denial, items 3 and 8
Substance use, items 4 and 11
Use of emotional support, item s 5 and 15
Use of instrumental support, items 10 and 23
Behavioral disengagement, items 6 and 16
Venting, items 9 and 21
Positive reframing, items 12 and 17
Planning, items 14 and 25
Humor, items 18 and 28
Acceptance, items 20 and 24
Religion, items 22 and 27
Self-blame, items 13 and 2 6

Brief COPE

These items deal with ways you've been coping with the stress in your life since you found out you were going
to have to have this operation. There are many ways to try to deal with problems. These items ask what you've
been doing to cope with this one. Obviously, different people deal with things in different ways, but I'm
interested in how you've tried to deal with it. Each item says something about a particular way of coping. I
want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer
on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response
choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU
as you can.

1 = I haven't been doing this at all

2 = I've been doing this a little bit
3 = I've been doing this a medium amount
4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situatio n I'm in.
3. I've been saying to myself "this isn't real.".
4. I've been using alcohol or other drugs to ma ke myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelin gs escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem mor e positive.
13. I've been criticizing myself.
14. I've been trying to come up w ith a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to thin k about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happ ened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religi on or spiritual beliefs.
23. I've been trying to get advice or help from other people about wha t to do.
24. I've been learning to live with it.
25. I've been thinking hard about wha t steps to take.
26. I've been blaming myself for things that happene d.
27. I've been praying or meditating.
28. I've been making fun of the situa tion.

REUSABLE BOOKLET

OF

Mangal Emotional Intelligence Inventory

(M E I I)

[English Version]

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No.	STATEMENT

PART - 1

1. Do you think yourself a man of poor soul ?
2. Do you often loose your temper ?
3. Do you feel that there is no end of miseries in your life ?
4. Do you often become sad by repenting over your mistakes ?
5. Are your feelings get hurted easily ?
6. Do you think that your will power is quite strong ?
7. Do you often say or do the things for which you have to repent afterwards.
8. Does your mind go somewhere else while engaged in some task ?
9. Do you remain perturbed with the fear of coming misfortunes ?
10. Do you feel extremely zealous at the progress of your colleagues ?
11. By observing that others are suffering, do you internally feel happy ?
12. Do you sometimes get too irritated to find yourself over burdened ?
13. Do you think yourself unsafe ?
14. Do you sometimes think yourself insulted or a degraded person ?
15. Do you hate or have elergy with so many things ?
16. Are your interests and desires get changed quite soon ?
17. Do you feel that there is no body in this world to show genuine sympathy for you ?
18. Getting upset, do you remain aware what is troubling you ?
19. Don't you realise any difficulty to express what is felt by you at a particular time ?
20. Do you think that you are very much familiar with your goodness and evils ?
21. Do you feel any hesitation or fear to express or doing a thing in a noble way or inventing something new with your own attempts ?

Sr. No.	STATEMENT

22. Do you think that you can't do anything in your life ?
23. Do you know well what makes you happy or sad ?
24. Do you think that you can very well meet any challenge coming in your life ?
25. Are you sure that you can easily win others heart ?

PART - 2

26. Do you like to settle issues with the persons instantly who speaks ill of you ?
27. Do you soon become normal after facing some adversaries in your life ?
28. Do you feel that you are exercising a lot of control over the things in your life ?
29. Are you able to take timely proper decisions inspite of so many contradictory desires creeping in your mind ?
30. Do you usually depends upon the guidance or help from others in solving your own problems ?
31. Do you execute your all tasks promptly and with full dedications ?
32. Do you often loose your patience and nerves by getting afraid of the failures ?
33. Do you feel perturbed for a long on being insulted by somebody else ?
34. Do you remain uneasy on account of your intention to take revenge on others ?
35. Are you never satisfied with your work and remain worried for its further improvement ?
36. Do you think that other people or circumstances are more responsible for your mistakes and improper habits ?
37. Do you think that you can't do anything properly ?
38. Do you often feel ashamed of your looks and behaviour ?

Sr. No.	STATEMENT

39. Do you remain much anxious and agitated until you get your desired object ?

40. Do you take too much time to learn a new technique by leaving the old ones ?

41. Do you finish what you set out to do ?

42. Whether being observed or not, do you stand for fulfilling your responsibilities properly ?

43. Do you think that you must do something unique than others ?

44. Do you agree that all of us should pick up the most challenging goals of our life ?

45. Do you feel extremely bad by listening about your mistakes and weaknesses from others ?

46. Do you sometimes loose your self-confidence in the moments of despair ?

47. Whenever confronted with some tedious problem, do you always run after seeking others help ?

48. Whenever you take a task in your hand, there goes something wrong resulting in the non-realization of your goal ?

49. Whenever you get a task spoiled, you begin to curse yourself ?

50. Do you not take any new assignment, unless inspired or forced by someone ?

PART - 3

51. Do you think that people nearer to you are fully trust worthy ?

52. Do others feel that you donot get perturbed even in the hard circumstances ?

53. Do you know or try to know the type of relationship maintained by the people among themselves in your neighourhood and friend circle ?

Sr. No.	STATEMENT
87.	If one of your colleagues commits a mistake, do you begin to criticise him before others ?
88.	Do you feel happy in congratulating others for their accomplishments ?
89.	Do you think instantly to help the person as soon as you hear about his problem ?
90.	Do you remain prepared for helping others irrespective of having ideological differences with them ?
91.	Can't you say "I love you" inspite of falling in love with him / her ?
92.	Do you think that it is better to keep distance or remaining emotionally indifferent with the strangers ?
93.	Do you enjoy laughing at or taunting others ?
94.	Instead of expressing your desire or interest by yourself do you think that the people by themselves will take care of it ?
95.	Do you think that it is your duty to inform your colleagues and relatives with some sad happenings irrespective of its consequences ?
96.	Do you try to ease tension by talking in lighter veins even in the serious moments of a task accomplishment ?
97.	Do you agree that it good to say a spade a spade in conversation irrespective of its being taken in a good or bad taste by the people ?
98.	Would you like to avoid visiting your friend when he is sad over the demise of a relative of him ?
99.	Do the people relish much to work alongwith you on some project or to listen to you attentively during a group discussion ?
100.	In conversation, do you wish that the people should continuously listen to you instead of making you listened to them ?

Sr. No.	STATEMENT
54.	Do you have an intuition that one of your friend is in trouble ?
55.	Do you take no time in realising that the other person is befooling you ?
56.	Do you realise soon that the person talking to you is a wolf in lamb's clothing ?
57.	Do you agree that, whatever so it may be, we should not get ourselves involved in others' affairs ?
58.	Do you have full trust in your friend / friends that they will stand by you at the moments of difficulties ?
59.	Do you realise soon that one of your friends or relatives is annoyed with you for some reasons ?
60.	Do you know well that what type of utterances and activities make your friends or relatives feel good or bad ?
61.	Can you say for yourself that you are capable of peeping into the hearts of others by reading their faces ?
62.	Do you say with confidence that you are well aware of the goodness and evils of your intimate friends or relatives ?
63.	Do you know well what is expected from you by your friends or members of the family ?
64.	Do you know well about the likings and dislikings of your nearest friends ?
65.	Do you realize that you are considered trustworthy and responsible by the people ?
66.	Do you try to place the needs and interests of others over your own ?
67.	Do you try to think before saying or doing something about its impact o others ?
68.	Do you give more importance to the maintenance of relationship with others irrespective of the losses or gains incurred in doing so ?
69.	Do you get perturbed by the thought that others are observing you o your actions ?
70.	Do you really often realise that who are jealous of your progress ?

Sr. No.	STATEMENT
71.	Can you tell properly who are your true friends or well wishers ?
72.	While observing people laughing or talking, do you feel that they are laughing at or talking ills of you ?
73.	Do you think that you are liked by the people on account of your good behaviour ?
74.	On falling ill, if one of your colleague enquires about your health, are you able to recognize whether he is showing a genuine sympathy or just pretending ?
75.	Do your friends or relatives expect from you the needed help and guidance at the time of their difficult hours ?

PART - 4

76.	Do you easily make friendship or acquaintence with others ?
77.	Do you think that it is not proper to trust anybody in this world ?
78.	Do you not like even to talk to the people who differ with you in opinions ?
79.	Do you easily get sympathy or help from others ?
80.	Do you feel happy in helping others in their difficult moments ?
81.	Do you take responsibility of getting people introduced with one another on some gathering or auspicious occasion ?
82.	Do you often try to provide leadership to some social or group work ?
83.	Do the members of the community or society have reservation in coming closer to you by considering you too much different from them ?
84.	Do you try to listen properly and pay due respect to the people or colleagues whenever they happen to meet you ?
85.	Do you think that other people or your colleagues unnecessarily keep over watch or vigilance on your activities ?
86.	Do you often have quarrels with your colleagues or other people ?

कथन

भाग - 1

क्या आप अपने को दुर्बल मन का व्यक्ति मानते हैं ?

क्या आप बहुत बार आपे से बाहर हो जाते हैं ?

क्या आपको लगता है कि आपकी जिन्दगी में दुखों का अन्त नहीं है ?

क्या आप अपनी गलतियों को याद करके अक्सर दुखी होते रहते हैं ?

क्या आपकी भावनाओं को जल्दी ही ठेस लग जाती है ?

क्या आप समझते हैं कि आपकी इच्छा शक्ति काफी दृढ़ है ?

क्या प्राय: आप ऐसी बातें कह या कर जाते हैं जिनके कारण बाद में आपको पछताना पड़ता है ?

क्या अक्सर किसी एक कार्य को करते हुये आप दूसरी बातें सोचने लगते हैं ?

क्या आप भविष्य में क्या होगा इस बात के लिये बहुत चिन्तित रहते हैं ?

क्या आपको अपने साथियों को आगे बढ़ते हुए देखकर बेहद जलन होती है ?

क्या दूसरे व्यक्तियों को तकलीफ उठाते देखकर आप मन ही मन प्रसन्न होते हैं ?

क्या काम काज के बढ़ जाने से आपको कभी-कभी बहुत झुंझलाहट हो जाती है ?

क्या प्राय: आप अपने आपको असुरक्षित सा अनुभव करते हैं ?

क्या कभी-कभी आप अपने आपको अपमानित या गिरा हुआ इन्सान समझते हैं ?

क्या आपको बहुत सी बातों से चिढ़ या घृणा है ?

क्या आपकी रुचियाँ और इच्छायें बहुत जल्दी-जल्दी बदला करती हैं ?

क्या आप सोचते हैं कि इस दुनिया में आपसे कोई सच्ची हमदर्दी दिखाने वाला नहीं है ?

किसी परेशानी के समय क्या आपको अच्छी तरह मालूम होता है कि कौन-सी बात आपको परेशान कर रही है ?

क्या किसी समय जैसा आप अनुभव कर रहे हैं उसे वैसे ही दूसरों को बताने में आपको कोई दिक्कत नहीं होती ?

क्या आप समझते हैं कि आप अपनी अच्छाईयों और बुराइयों से भलीभाँति परिचित हैं ?

कथन

क्या आप अपने स्वयं के प्रयत्नों द्वारा कोई नयी खोज या किसी बात को नये ढंग से कहने या करने में हिचकिचाहट या घबराहट का अनुभव करते हैं ?

क्या आप यह सोचते हैं कि आप अपनी जिन्दगी में कुछ नहीं कर सकते ?

क्या आप अपने बारे में यह अच्छी तरह जानते हैं कि किन बातों से आपको सुख या दुख पहुँचता है ?

क्या आप यह समझते हैं कि जिन्दगी में आने वाली हर चुनौती का आप डट कर मुकाबला कर सकते हैं ?

क्या आपकी अपने बारे में यह धारणा है कि आप लोगों का दिल आसानी से जीत लेते हैं ?

भाग - 2

क्या अपने बारे में गलत बात कहने वाले से आप शीघ्र ही निपट लेना चाहते हैं ?

क्या आप अपनी जिन्दगी में आने वाले झटकों से शीघ्र ही उबर जाते हैं ?

क्या आप यह महसूस करते हैं कि आपकी जिन्दगी में काफी कुछ आपके नियन्त्रण में है ?

मन में विरोधी इच्छाओं के उत्पन्न होने पर समय को देखते हुये क्या आप उचित निर्णय लेने में सफल हो जाते हैं ?

क्या अपनी समस्यायें सुलझाने में आपको प्राय: दूसरों के परामर्श या सहायता पर निर्भर रहना पड़ता है ?

क्या आप अपना हर काम पूरी लगन और तत्परता से करते हैं ?

क्या आप प्राय: असफलताओं से घबराकर अपना धैर्य और संतुलन खो बैठते हैं ?

क्या किसी के द्वारा अपमानित होने पर आप काफी समय तक परेशान रहते हैं ?

क्या दूसरों से प्रतिशोध लेने की इच्छा आपको परेशान करती रहती है ?

क्या आपको अपने किये हुये कार्य से कभी भी पूरी संतुष्टि नहीं होती तथा आप उसे और अच्छा बनाने के लिये चिन्तित रहते हैं ?

क्या आप सोचते हैं कि आपकी गलतियों अथवा गलत आदतों के लिये दूसरे लोग अथवा परिस्थितियाँ अधिक उत्तरदायी हैं ?

क्या आपको लगता है कि आप किसी भी काम को ठीक तरह से नहीं कर पाते ?

क्रमांक	कथन
38.	क्या आप जैसे दिखाई देते हैं या व्यवहार करते हैं उससे आपको अक्सर शर्मिन्दगी का अनुभव होता है ?
39.	जब तक अपनी इच्छित वस्तु को प्राप्त न कर लें तब तक उसे लेकर क्या आप बहुत ही व्यग्र या चिन्तित रहते हैं ।
40.	क्या आपको प्रचलित तरीकों से हटकर नये तरीके अपनाने में काफी समय लगता है ?
41.	क्या आप एक बार जो ठान लेते हो, उसे पूरा करके ही दम लेते हैं ?
42.	क्या आपको कोई देखे या न देखे आप अपना उत्तरदायित्व हर समय ठीक तरह निभाना चाहते हैं ?
43.	क्या आप यह अनुभव करते हैं कि आपको कुछ ऐसा करना चाहिये जो दूसरों से हटकर हो ?
44.	क्या आप यह मानते हैं कि सभी को अपने जीवन लक्ष्य ऐसे चुनने चाहिये जो अधिक से अधिक चुनौतीपूर्ण हों ?
45.	क्या दूसरों के द्वारा अपनी कमजोरियों या गलतियों के बारे में कुछ भी सुनकर आपको बेहद बुरा लगता है ?
46.	क्या निराशा के क्षणों में कभी-कभी आपका अपने ऊपर से विश्वास ही उठ जाता है ?
47.	क्या जब भी आप किसी गंभीर समस्या से घिर जाते हैं तो दूसरों से सहायता लेने को दौड़ पड़ते हैं ?
48.	क्या जब भी आप कोई कार्य हाथ में लेते हैं तो कोई न कोई बात ऐसी हो जाती है कि आप लक्ष्य तक नहीं पहुँच पाते ?
49.	जब भी आपसे कोई काम बिगड़ जाता है तो क्या आप अपने आपको कोसना शुरू कर देते हैं ?
50.	क्या जब तक आपको कोई प्रेरित या मजबूर न करे आप कोई कार्य नहीं कर सकते ?

भाग - 3

क्या आपका अपने नजदीकी लोगों पर पूरा विश्वास है ?

क्या दूसरों की आपके बारे में यह धारणा है कि आप कठिन परिस्थितियों में भी विचलित नहीं होते ?

क्या आप यह जानते हैं या जानने की कोशिश करते हैं कि आपके नजदीकी किसी भी सामाजिक समूह जैसे पास-पड़ोस, मित्रमंडली आदि में किसके किसके साथ कैसे सम्बन्ध हैं ?

कथन

क्या आपको जल्दी ही यह आभास हो जाता है कि आपका कोई नजदीकी मित्र किसी कारण परेशान है ?

क्या आपको यह जानने में देर नही लगती कि दूसरा व्यक्ति आपको बेवकूफ बना रहा है ?

क्या आप जल्दी ही जान जाते हैं कि आपसे बात करने वाले के मुँह में राम तथा बगल में छुरी है ?

क्या आप यह मानते हैं कि चाहे कुछ भी हो हमें दूसरों के पचड़े में नहीं पड़ना चाहिए ?

क्या आपको अपने किसी मित्र/मित्रों पर पूरा विश्वास है कि वे कठिन समय में आपका साथ देगें ?

क्या आपको जल्दी ही यह आभास हो जाता है कि आपका कोई मित्र या परिजन आपसे किसी कारणवश नाराज है ?

क्या आप अच्छी तरह जानते हैं कि किन बातों को कहना या करना आपके मित्र या परिजनों को अच्छा या बुरा लगता है ?

क्या आप अपने लिये यह मानते हैं कि आप दूसरों के चेहरे पढ़कर उनकी दिल की बात समझ लेते हैं ?

क्या आप यह अच्छी तरह कह सकते हैं कि आपको अपने नजदीकी साथियों या परिजनों की अच्छाई-बुराइयों का भली-भाँति ज्ञान है ?

क्या आप यह अच्छी तरह जानते हैं कि आपके मित्रों या घरवालों की आपसे क्या-क्या अपेक्षायें हैं ?

क्या आपको अपने नजदीकी दोस्तों की पसंद-नापसंद तथा रुचि-अरुचि के बारे में ठीक तरह ज्ञान है ?

क्या आप यह अनुभव करते हैं कि लोग आपको एक विश्वसनीय और जिम्मेदार व्यक्ति समझते हैं ?

क्या आप अपने से पहले दूसरों की आवश्यकताओं तथा चाहत को समझने की कोशिश करते हैं ?

कुछ कहने या करने से पहले क्या आप यह सोचने का प्रयत्न करते हैं कि दूसरों पर इसका क्या असर होगा ?

क्या अपने फायदे या नुकसान की परवाह किए बिना आप दूसरों से सम्बन्ध बनाए रखने को अधिक महत्व देते हैं ?

क्या आप इस विचार से परेशान हो जाते हैं कि दूसरे आपको या आपके कार्य को देख रहे हैं ?

क्र.	कथन
	क्या आपकी अक्सर अपने साथियों या दूसरे लोगों के साथ कहा सुनी हो जाती है ?
	क्या अपने किसी साथी के द्वारा कोई गलती होने पर आप सभी के सामने उसकी आलोचना करने लग जाते हैं ?
	क्या आप दूसरों को उनकी उपलब्धियों के लिये बधाई देने में प्रसन्नता का अनुभव करते हैं ?
	क्या जैसे ही आपको किसी की समस्या के बारे में पता चलता है आप तुरन्त ही उसकी सहायता करने के बारे में सोचने लगते हैं ?
	क्या विचारों में भिन्नता होते हुये भी आप दूसरों की सहायता के लिये तैयार रहते हैं ?
	क्या किसी से प्यार होते हुए भी आप **'मैं तुम्हें प्यार करता हूँ'** ऐसे शब्द नहीं बोल पाते ?
	क्या आप यह मानते हैं कि अपरिचितों से थोड़ा दूर या भावनात्मक रूप से ठंडा रहना ही ठीक है ?
	क्या आपको दूसरों पर हँसना या छींटाकशी करना अच्छा लगता है ?
	क्या अपनी पसन्द या चाहत को व्यक्त करने के बजाय आप यह सोचते हैं कि दूसरा व्यक्ति स्वयं ही इसे समझ लेगा ?
	क्या आप यह सोचते हैं कि किसी भी दुखद समाचार से अपने साथी या परिजनों को तुरन्त ही अवगत करा देना चाहिये चाहे उसका नतीजा कुछ भी क्यों न हो ?
	क्या कामकाज के गंभीर क्षणों में भी आप हल्की-फुल्की बातें कर माहौल को सहज बनाने की कोशिश करते हैं ?
	क्या आप यह मानते हैं कि वाद-विवाद में उलझने पर चाहे किसी को अच्छा लगे या बुरा, खरी खरी कहना ही ठीक रहता है ?
	आपका मित्र अपने किसी आत्मीय की मृत्यु से दुखी है, इस समय क्या आप उससे मिलने जुलने से कतरायेंगे ?
	क्या सामूहिक चर्चा या प्रोजेक्ट में लोग आपकी बातें ध्यान से सुनना या आपके साथ काम करना काफी पसन्द करते हैं ?
	क्या वार्तालाप के दौरान आप यह चाहते हैं कि दूसरों की बातें सुनने की बजाय आप अपनी ही बातें कहते रहें ?

क्रमांक	कथन
70.	क्या वास्तव में आपको अक्सर यह आभास हो जाता है कि कौन व्यक्ति आपकी प्रगति से जलते हैं ?
71.	क्या आप ठीक तरह से यह बता सकते हैं कि आपके हितैषी या सच्चे मित्र कौन हैं ?
72.	क्या किसी को हँसते या बातें करते हुए देखकर आपको ऐसा लगता है कि वे आपको देखकर हँस रहे हैं या आपकी बुराई कर रहे हैं ?
73.	क्या आपको ऐसा लगता है कि आपके अच्छे व्यवहार के कारण लोग आपको पसन्द करते हैं ?
74.	आपके अस्वस्थ्य होने पर अगर कोई साथी आपका हालचाल पूछता है तो क्या आपको उसकी वास्तविक संवेदना या दिखावे की पहचान हो जाती है ?
75.	क्या आपके मित्र या परिजन कठिन परिस्थितियों में आपसे परामर्श या सहायता मिलने की आशा रखते हैं ?

भाग - 4

76.	क्या आप आसानी से नये मित्र बना लेते हैं या जान पहचान बढ़ा लेते हैं ?
77.	क्या आप समझते हैं कि इस संसार में किसी पर विश्वास करना ठीक नहीं है ?
78.	क्या आप अपने से अलग विचारधारा वाले व्यक्तियों से बातें करना या मिलना-जुलना भी पसन्द नहीं करते ?
79.	क्या आप जल्दी ही दूसरों से सहायता या सहानुभूति प्राप्त कर लेते हैं ?
80.	क्या आपको दूसरे व्यक्तियों की मुसीबत में सहायता करना अच्छा लगता है ?
81.	क्या आप किसी समारोह में लोगों की एक दूसरे से जान पहचान कराने की जिम्मेदारी ले लेते हैं ?
82.	क्या आप अक्सर सामूहिक कार्यों में आगे रहकर नेतृत्व प्रदान करने की कोशिश करते हैं ?
83.	क्या समुदाय के लोग अथवा आपके साथी आपको अपने से बहुत अधिक दूर मानकर आपसे मिलने जुलने से कतराते हैं ?
84.	क्या दूसरे व्यक्तियों या साथियों के मिलने पर आप उन्हें पर्याप्त सम्मान देने या उनकी बातें ध्यान से सुनने का प्रयत्न करते हैं ?
85.	क्या आप समझते हैं कि दूसरे लोग या आपके साथी आपके कार्यों पर अनावश्यक रूप से कड़ी नजर रखते हैं या आपके बारे में जासूसी करते हैं ?

table 8.

TABLE 8

Classification of Emotional Intelligence in terms of Categories

tegories	Description	Range of Scores	
		Female	Male
A	Very Good	88 & above	90 & above
B	Good	75–87	77–89
C	Average	61–74	63–76
D	Poor	48–60	49–62
E	Very Poor	47 & below	48 & below

ng Procedure

Scoring can be done by hand or with the help of stencil.

he mode of response to each of the item of the inventory is in the form of a d choice i.e. either **yes** or **no**, indicating complete agreement or eement with the proposed statement respectively. In the present Emotional ence Inventory thus there are item where the response 'yes' is indicative of esence of emotional intelligence and 'no' for the lack of emotional ence. Similarly, there are items where 'no' response provides clue for the ce of emotional intelligence and 'yes' for its absence.

or scoring one mark into be provided for the response indicating presence tional intelligence and zero for the absence of emotional intelligence.

TABLE 10

Scoring Scheme of Emotional Intelligence Inventory

	Mode of Response	Score
S. No. of Items (where 'yes' response shows presence of intelligence) 6, 18, 19, 20, 23 to 25, 27 to 29, 31, 41 to 44, 51 to 56, 58 to 68, 70, 71, 73 to 76 79 to 82, 84, 88 to 90, 96, 99	'Yes' 'No'	1 0
S. No. of Items (where 'no' response shows presence of intelligence) 1 to 5, 7 to 17, 21, 22, 26, 30, 32 to 40, 45 to 50, 57, 69, 72, 77, 78, 83, 85 to 87, 91 to 95, 97, 98, 100	'No' 'Yes'	1 0

Interpretation of a Subject's Score

For interpreting an individual score, help may be taken from the given percentile scores in Tables 6 and 7 separately for male and female students. The subject's scores denoting his level of emotional intelligence may also be interpreted (area wise as well as total) in terms of one of the five categories provided in tables 8 and 9. Since the present emotional intelligence is scored on the positive side i.e. presence of emotional intelligence, a higher scores of the individual (in the respective areas as well as total) here shows a higher level of emotional intelligence and lower score a lower level of emotional intelligence. The higher percentile rank of a subject may provide a quite satisfactory position of his or her level of emotional intelligence in a group of the population tested.

INFORMED PATIENT CONSENT

Date: _____

I.....D/o, W/o, S/o..... .....am willing to participate in the study **"GENDER DIFFERENCES IN EMOTIONAL INTELLIGENCE AND COPING STRATEGIES IN PATIENTS OF BIPOLAR DEPRESSIVE DISORDER"** The procedure with its complications has been explained to me in local vernacular language. I have fully understood that no special tests and extra expenditure in any form, merely for the purpose of thesis is being carried out. I am free to opt out the study any time without assigning any reason.

.....
Signature of the Witness

Name:

.....
Signature of the patient

Signature of Candidate

Signature of Supervisor

मरीज अनुमति फार्म

तिथि _____

मैं _____ पत्नी/पुत्र/पुत्री _____

निवासी _____

इस शोधकार्य **"GENDER DIFFERENCES IN EMOTIONAL INTELLIGENCE AND COPING STRATEGIES IN PATIENTS OF BIPOLAR DEPRESSIVE DISORDER"** में भाग लेने के लिए सहमत हूँ। मैं इस शोधकार्य में भाग लेने के लिए अपनी स्वेच्छा से तैयार हूँ। मैं पुष्टि करता/करती हूँ की यह स्वीकृति देने के लिए मुझे कोई आर्थिक प्रलोभन नहीं दिया गया और न ही दबाव डाला गया है। मुझे इस शोधकार्य का उद्देश्य स्पष्ट कर दिया गया है और मुझे यह विश्वास है की यह विज्ञान और मानवता के लाभ के लिए है। मुझे इस शोधकार्य में होने वाले जोखिम के बारे में समझा दिया गया है और मेरी समझ में यह जोखिम बहुत मामुली है।

मैं इस शोधकार्य में भाग लेने के सम्बन्ध में किसी भी समय अपनी अस्वीकृति व्यक्त कर सकता/सकती हूँ और मेरे अस्वीकृति व्यक्त करने का मेरे इलाज पर कोई प्रभाव नहीं पड़ेगा।

_____

गवाह के हस्ताक्षर

नाम:

_____

रोगी के हस्ताक्षर/अंगूठे का निशान

नाम:

_____

अन्वेषक के हस्ताक्षर

_____

विद्यार्थी के हस्ताक्षर

ਮਰੀਜ਼ ਰਜ਼ਾਮੰਦੀ ਫਾਰਮ

ਮਿਤੀ_____

ਮੈ_____ਪਤਨੀ/ਪੁੱਤਰ/ਪੁੱਤਰੀ_____

ਵਾਸੀ _____

"GENDER DIFFERENCES IN EMOTIONAL INTELLIGENCE AND COPING STRATEGIES IN PATIENTS OF BIPOLAR DEPRESSIVE DISORDER" ਤੇ ਚਲ ਰਹੀ ਖੋਜ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਲਈ ਰਜ਼ਾਮੰਦ ਹਾਂ। ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਲਈ ਮੈ ਆਪਣੀ ਮਰਜ਼ੀ ਨਾਲ ਤਿਆਰ ਹਾਂ। ਮੈ ਇਹ ਦਸਣਾ ਚਾਹੁੰਦਾ ਹਾਂ/ ਚਾਹੁੰਦੀ ਹਾਂ ਕੇ ਇਹ ਰਜ਼ਾਮੰਦੀ ਦੇਣ ਵਾਸਤੇ ਮੈਨੂ ਕਿਸੇ ਵੀ ਤਰਾਂ ਦਾ ਲੋਭ-ਲਾਲਚ ਨਹੀ ਦਿੱਤਾ ਗਿਆ ਅਤੇ ਨਾ ਹੀ ਕੋਈ ਦਬਾ ਪਾਇਆ ਗਿਆ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਦਾ ਮਨੋਰਥ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ ਅਤੇ ਮੈਨੂ ਇਹ ਭਰੋਸਾ ਦਵਾਇਆ ਗਿਆ ਹੈ ਕੇ ਇਹ ਖੋਜ ਵਿਗਿਆਨ ਅਤੇ ਮਾਨਵਤਾ ਦੀ ਭਲਾਈ ਲਈ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਵਿਚ ਹੋਣ ਵਾਲੇ ਖਤਰੇ ਬਾਰੇ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ ਅਤੇ ਮੈਨੂ ਇਹ ਯਕੀਨ ਹੈ ਕੇ ਇਹ ਖਤਰਾ ਬਹੁਤ ਮਾਮੂਲੀ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਦਾ ਢੰਗ – ਤਰੀਕਾ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ।

ਮੈ ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਬਾਰੇ ਆਪਣੀ ਰਜ਼ਾਮੰਦੀ ਕਿਸੇ ਵੀ ਸਮੇ ਵਾਪਸ ਲੈ ਸਕਦਾ ਹਾਂ/ ਸਕਦੀ ਹਾਂ ਅਤੇ ਮੇਰੀ ਰਜ਼ਾਮੰਦੀ ਵਾਪਸ ਲੈਣ ਦਾ ਮੇਰੇ ਇਲਾਜ ਤੇ ਕੋਈ ਅਸਰ ਨਹੀ ਹੋਵੇਗਾ।

_____
ਗਵਾਹ ਦੇ ਹਸਤਾਖਰ

ਮਿਤੀ_____

ਪਤਾ _____

_____
ਮਰੀਜ਼ ਦੇ ਹਸਤਾਖਰ

ਮਿਤੀ_____

ਪਤਾ _____

_____
ਨਿਰੀਖਕ ਦੇ ਹਸਤਾਖਰ

_____
ਸਿਖਿਆਰਥੀ ਦੇ ਹਸਤਾਖਰ